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THE NATURE OF RHEUMATISM.

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Read before the San Joaquin County Medical Society.

Few troubles are commoner than rheumatism, and yet, as a matter of fact, what do we know about it? We are not agreed as to its nature; and who among us is satisfied with its therapy? As to the diagnosis, cases of the most varied kind are classified under the head of rheumatism, until, like charity, it now "covereth a multitude of sins."

It is time we called a halt with many of our so-called diseases, and reclassified numerous disorders, differing both in cause and nature, but grouped under common heads. My object in presenting this paper is to call your attention to the chaotic state of our knowledge of this common disorder, and to summarize the published results of researches during the past few years.

The theories advanced by writers upon this subject are divisible into: (1) Bacterial. (2) Miasmatic. (3) Uric Acid. (4) Lactic Acid. (5) Nerve Theory.

Bacterial Theory.—Popow found micrococci in the blood of acute articular rheumatism patients. Craig regards rheumatism as a germ disease, believing that the germs select the lymph spaces, especially of the synovial sacs. He thinks they induce engorgement with serous effusion and produce ptomaines, which are carried in the venous blood to the right side of the heart, and thence to the lungs, where contact with the oxygen of the air cells adds to their toxic or irritant qualities, so that when carried around to the left side of the heart they excite a true inflammation—an endocarditis.

Researchers have arrived at very different conclusions as to the nature of the supposed germ. Some claim to have found two varieties. Some have never been able to find any. Bordas found a bacillus in some cases, which he cultivated and injected into rabbits, producing endocarditis with vegetations. The staphylococcus albus and aureus have been found frequently; also a new bacillus, whose culture-inoculations produced symptoms resembling rheumatism. Pel claims that it is due to an organism identical with or similar to

the malarial organism. As to so-called gonorrheal rheumatism, the best authorities consider it due to the pus-producing germs, and not to the gonococcus.

Miasmatic Theory.—Webber considers rheumatism to be due to miasma, as it appears with decreasing rain and moisture, and decreases with an increasing rain and moisture. Maclagan, the discoverer of salicin, defends the miasmatic theory. He attacks the lactic acid theory because of his failure to cure rheumatism by alkaline treatment. He considers the presence of lactic acid in abnormal amount as an effect of the rheumatic poison, though he admits that this excess leads to functional disturbance of the locomotor apparatus, of which it is an excretory product. This functional disturbance is manifested in white fibrous tissue by pain.

Grün found the blood saturated with minute micrococci. Stahli found the staphylococcus citreus in the fluids of the joints, glands, endo- and pericardium, after death from rheumatism. Garrod found in the blood a great decrease of red corpuscles, with some increase in the number of white corpuscles.

Lactic Acid Theory.—Chadwick says that neither by cold, heat, nor dampness alone, will rheumatism be caused; but that rapid reduction of temperature following after a rapid disintegration of fibrous tissue from protracted exercise (which increases the formation of lactic acid) will result in rheumatism. Porter upholds the lactic acid theory, but claims that excessive production of lactic acid is due to dietetic errors—by eating of food containing a large percentage of starch and sugar. That when more is introduced than can be completely oxidized, by-products of incomplete oxidation collect, especially lactic acid. This lactic acid unites with sodium and calcium salts, forming insoluble or slightly soluble lactates, which precipitate and deposit in the tissues.

Uric Acid Theory.—Haig says that when the blood or tissue-fluids become less alkaline in any region, the uric acid which comes there with the blood is less soluble, and is consequently retained there instead of passing on in the blood. Garrod says that certain tissues and regions, as the liver, spleen, cartilages, and fibrous tissues of joints are normally less alkaline than other tissues. When any general decrease in alkalinity occurs, it is first and most noticed in such places, and uric acid is retained there. The uric acid and biurates thus concentrated there, give rise to irritation, going on to inflammation, which is, roughly, proportional to the amount of uric acid concentrated at the spot, and the duration of its action.

According to Bell, by far the larger number of cases of rheumatism are induced by auto-intoxication from long-continued constipa-

tion. This self-poisoning reduces the general vitality and decreases the vitality of the blood, together with the other parts of the economy, rendering it a fitter nidus for the microorganisms which cause rheumatism. Exposure to cold and wet also depresses the vital forces and may prove an exciting cause, but only if habitual constipation has existed. Haig also laid stress upon auto-intoxication due to chronic constipation, but considered its effect due to the absorption of acid from the large intestine, thus diminishing the alkalinity of the blood, the result being an accumulation of uric acid in the body and a precipitation of it into the joints.

Nervous Theory.—Harkins discards all the other theories for rheumatism, and accepts the theory which places it in the list of nervous affections. He concludes that a chilling of the surface of the body is the starting point, and that the morbid effect is produced through the agency of the nervous system. He maintains that the cardiac affection is the initial effect, and that from this come all the other developments of the disease. He considers that in every case there is endocardial involvement, though it may not always be recognizable clinically.

Wichman has endeavored to prove that in chronic articular rheumatism there is spinal-cord trouble as the primary seat of the disorder. He cites the fact that the visible lesions of rheumatism are so often symmetrical, especially such lesions as erythema, phalangeal nodes, joint, and bursal affections.

Those who regard rheumatism as a disorder of the nervous system, consider that the nervous centers are either primarily affected by cold and moisture, producing the peripheral lesions through trophic disturbance, as in tabes, myelitis, etc., or that, through disturbance of the central nervous system, errors in metabolism result, leading to suboxidation, with accumulation of lactic acid in the system.

In speaking of the lesions of rheumatism, Prettyman says that it is the expression of a general condition, manifested by lesions of the vascular and hematopoietic systems, extending to every tissue and structure in the body. It is characterized by hyperemia, acute and chronic inflammations, with overgrowth of connective tissue, and a deposition of insoluble salts. The eliminating organs have thrown upon them more than they can accomplish, and thus weakened by excessive stimulation lose their proper strength and function.

The question as to the involvement of muscle in rheumatism is still somewhat disputed; but the mass of authority is inclined to the opinion that muscle-tissue proper is not affected by rheumatism, and they favor the entire disuse of the expression "muscular rheuma-

tism." The pathological cause of these muscular conditions is far from being settled. Some modern authorities deny their existence, while others admit the possibility of rheumatism as a primary cause. Flint regards so-called muscular rheumatism as an affection of the sensory nerve-terminals in the muscles—true rheumatism affecting only serous and fibrous structures. Howard, of McGill University, says that muscular pains are due to hyperemia and slight serous exudation, with a neuralgia of the nerve filaments. Some cases of subacute rheumatism may spread from a joint to the tendinous sheaths close by, and then secondarily cause inflammation of the muscle itself, leaving the muscle trouble ultimately as the only condition present.

Lyman, in "Pepper's Theory and Practice of Medicine," admits the existence of muscular rhumatism. Osler places myalgia under the heading of rheumatism, though admitting the questionableness of such a classification. Myalgia accompanies the majority of cases of acute and chronic articular rheumatism, as well as being an independent affection. Sudden refrigeration, injuries, strains, and over-exertions are exciting causes. Loomis admits the existence of muscular rheumatism. Fagge regards lumbago as due to irritation of the kidneys by hyper-acid urine, and advocates treating it by the internal use of potassium citrate in full doses, at frequent intervals. The probability is that the essential condition is hyperemia with serous exudation; and in chronic cases there is malnutrition.

The question as to the identity of chronic articular rheumatism with rheumatoid arthritis is still somewhat disputed by certain writers, as is the question as to the nature of so-called scarlatinal, gonorrheal, and other "complicating rheumatisms." I have not discussed these questions, as the generally received opinion at present regarding complicating rheumatisms is that they are arthritic affections, due either to the specific poison of each of these individual diseases, or to the presence of accompanying pyogenic cocci. Rheumatoid arthritis is due wholly to great depression of the entire system, with accompanying malnutrition of the central nervous system, the joint affections being of trophic nature.

THE DIAGNOSIS AND TREATMENT OF THE DISEASES OF THE ACCESSORY SINUSES OF THE NOSE.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Read before the California Northern District Medical Society.

By accessory sinuses of the nose are meant the maxillary, ethmoidal, frontal, and sphenoidal sinuses. Each of these communicates with the nasal cavity by one or more small openings. The

importance and frequency of diseases of these cavities is, in my opinion, often overlooked. During and subsequent to epidemics of *la grippe* these cavities are frequently involved, and often the severe pain accompanying an acute attack is looked upon as neuralgic in character. A large proportion of the simple catarrhal troubles recover spontaneously, or by the aid of mild local applications to the nasal mucous membrane. On the other hand, if severe, and if their nature is not early recognized and properly treated, they may become most serious affections, occasionally resulting fatally. These cavities are rarely the primary seat of disease, but usually become affected by the extension of inflammatory processes from the nasal mucous membrane, or from obstruction of the drainage through their natural openings.

Catarrhal disease of the cavities may terminate by resolution, or, under favorable conditions, it may become suppurative in character. The conditions which frequently cause suppuration are hypertrophy of the turbinated bodies, polypi, or other new growths, which cause obstruction to the natural drainage channels. Traumatism and constitutional diseases, such as syphilis and tuberculosis, are also common causes of sinus disease. Besides the causes common to affections of all the sinuses, diseased teeth are frequently the source of disease of the maxillary sinus, or antrum of Highmore. By many men of large experience decayed or dead teeth are considered to be the most frequent cause of antrum trouble. This view is not, however, borne out by the experience of most observers.

In the beginning of antral trouble, pain and sense of weight or fulness below the orbit are experienced. If the pent-up secretion does not soon find an outlet the pain may become intense, the teeth and cheek becoming tender to pressure. When the contents of the cavity escape, either spontaneously or by the aid of the surgeon, they are generally found to be purulent and of offensive odor. The purulent affections of the sinus rarely recover spontaneously, but require, as a rule, surgical treatment. The diagnosis of antral disease is often perplexing. Unilateral discharge of pus from the nose should excite suspicion of some sinus disease. The causes of purulent nasal discharge are foreign bodies, or rhinoliths, neoplasms, nasal diphtheria, and disease of the accessory sinuses, and in children purulent rhinitis. Foreign bodies, syphilis, and new growths are the only affections which give rise to unilateral purulent nasal discharge of nasal origin. An inspection of the nasal cavity will determine if any of these causes exist, and will differentiate between sinus disease and a nasal origin of the pus. The character and odor of the

discharge is usually different in sinus disease from that arising from nasal disease.

To assist in examining for sinus disease the tissues should be contracted as much as possible by the application of a 4 per cent cocaine solution. If the pus come from the antrum the lower border of the middle turbinated body will most likely be covered with a bright yellow or straw-colored pus, which may also cover the lower turbinated body and lie on the floor of the nose. By wiping the pus away it may be seen to flow from beneath the middle turbinated body, and if pressure with a probe covered with cotton be made in that vicinity an increased flow of pus of a fetid odor will be obtained. To decide from which sinus the flow comes the pus should be wiped away and the patient directed to hold his head well down between the knees for some moments, or to lie down, with the affected side uppermost. If an increased flow is produced by either of these positions, it is pretty conclusive of disease of the maxillary sinus, or antrum of Highmore.

Transillumination is a very valuable aid in the diagnosis of antral disease. The patient must be placed in a well-darkened room. A strong electric lamp made for the purpose is placed in the mouth, which is closed over it. In case the maxillary sinuses are healthy the glow of light will be seen transmitted through the tissues of the face and will shine through beneath the eyes. If either sinus be filled with fluid the glow of light will be absent from that side. In certain conditions of hypertrophic rhinitis, new growths, and deflection of the septum, a similar appearance of light may be produced, but intra-nasal inspection will determine whether these conditions exist, and can be the cause of the changed appearance of the light.

To illustrate some of these points, I shall report two cases of maxillary sinus disease:

Empyema of the Maxillary Sinus caused by a Diseased Tooth.—T. H. D——, aged 33, laborer, had been troubled for more than a year with purulent discharge from the left nostril. The odor was, at times, quite offensive. Upon inspection, pus could be seen flowing over the lower border of the middle turbinated body. The nasal mucous membrane was healthy, with the exception of a moderate degree of inflammation. After wiping the thin yellow pus away, the patient held his head forward between the knees for a few moments and an increased flow of the pus was found to have taken place. A decayed and dead second molar tooth was found. This was extracted and the opening into the antrum was enlarged with a drill. Pus flowed freely out of this opening and the cavity was thoroughly washed out, twice daily, with a weak creolin solution. At the end of about five weeks the secretion of pus had ceased and the irrigations were stopped without further trouble.

Traumatic Empyema of the Maxillary Sinus.—R. M——, aged 28, laborer, while at work was thrown with considerable violence against a sharp instrument, which penetrated the right cheek to such a depth that considerable force was required to withdraw it. Within two or three days a profuse purulent discharge flowed from the wound. No loose bone could be detected and the case was treated by washing the antrum out with a boracic acid solution through the wound. The solution drained into the nose, but after two months' treatment no improvement was evident. The second molar was extracted, an opening was drilled through the alveolus, and irrigation with antiseptic solutions was made once a day. After six weeks' treatment the purulent secretion had abated, the external sinus in the cheek had closed, and the patient was discharged cured.

There has been a case reported in which a supernumerary tooth found in the antrum was the cause of the suppuration. In cases where the teeth are healthy and the trouble is not produced by obstruction of the natural opening, the ostium maxillare by hypertrophy, new growths, or by injury, it is best to open the antrum through the canine fossa and explore for diseased bone or new growths and remove them and the pyogenic lining of the cavity. The cavity should then be packed with iodoform gauze and irrigated and repacked daily until cured. In cases caused by retained secretion from hypertrophy of the turbinated bodies or new growths, an effort should be made to cure the case by removal of the obstructions and treatment of the nasal condition. If this fails, drainage should be established by an operation.

Disease of the ethmoidal sinus is more difficult to diagnose than disease of the antrum. Catarrhal affections of this cavity accompany severe catarrhal rhinitis. These generally recover as the nasal inflammation subsides. The prominent symptom of this condition is the pain referable to the lower frontal region.

Suppurative disease of the ethmoidal sinus is a much more grave affection, as it tends to necrosis of the bony walls of the cavity and to meningitis. It most commonly develops as the result of hypertrophy or new growths, which obstruct the natural opening, the ostium ethmoidale. Traumatism is a rare cause of the affection.

One important point in the differential diagnosis between ethmoidal and antral empyema is the point at which the pus is found to be flowing over the inferior turbinated body. In maxillary disease, the pus, as I have already said, will be found to cover the lower border of the middle turbinated and to flow over the middle of the inferior turbinated, while in ethmoidal disease the pus covers the posterior portion of the inferior turbinated body. In addition, if the trouble be serious, there will be emphysema of the orbit with exophthalmos.

The treatment should be directed to the nasal condition by first

removing any growth that may obstruct the natural drainage, and by the application of disinfecting sprays and douches. Some operators open into the cavity from the nose. The results of the operations are not always successful and the treatment is usually restricted to the nasal conditions. In case an orbital abscess appears it should be promptly opened and drainage established.

The following case is one of *Empyema of the Ethmoidal and Frontal Sinuses*.—A. M——, aged 68, farmer, had been suffering intense pain located in the frontal region, and below the eyes, for five weeks. He had been obliged to resort to anodynes several times daily to lessen the severe pain. The conjunctivæ of both eyes were greatly inflamed; the right lids were edematous. A hard tumor could be felt in the swollen cellular tissue in the upper part of the right orbital cavity which displaced the eye downward and outward. There was considerable hypertrophic rhinitis and some polypoid growths in the vicinity of the infundibulum. An incision was made into the orbital tumor, the cavity washed out with peroxide of hydrogen (Marchand's) and the wound packed with iodoform gauze. The nasal polypi were removed and the nasal hypertrophy reduced to some extent, but on account of the patient's dread of operative treatment, the natural drainage was not established nor the discharge through the orbital sinus cured. The relief from pain being complete and the few drops of glairy mucus which continued to discharge through the orbital sinus, causing the patient little inconvenience, he declined further operative treatment. The slight secretion from the orbital opening has persisted during the past two years, and is likely to continue indefinitely unless better drainage is established through the nose or the sinuses are opened and the pyogenic lining to the cavities curetted out.

Catarrhal and suppurative inflammation of the sphenoidal sinus has much the same history as disease of the sinuses already mentioned. Hypertrophy, new growths, and deformity of the nose cavity usually setting up the trouble. Syphilis and tuberculosis also play important roles in the etiology. Suppurative disease of the sphenoidal sinus is of serious import from the necrosis which is likely to result and extend to the neighboring tissues.

The differential diagnosis between this disease and ethmoiditis is extremely difficult and not always possible. The two sinuses are affected simultaneously. In sphenoidal suppuration, the discharge is more likely to find its way into the pharynx than into the anterior nares. If the pus does not escape freely, pressure is likely to be produced upon the optic nerve and sudden blindness result. Ophthalmoscopic examination would reveal a swollen disk, characteristic of pressure upon the nerve. In some cases, the sinus swelling is so great as to be manifest in the post-nasal space, causing obstruction to nasal breathing. If a careful examination reveals the

point of discharge of the pus into the naso-pharynx, and it is seen to come from the posterior part of the superior meatus, we may reasonably conclude that the sphenoidal sinus is involved.

The treatment must first be directed to removing any obstruction to the natural opening of the sinus, and subsequently, the use of antiseptic nasal sprays and douches. It may be found necessary to open into the sinus with the trephine or with a sharp gouge. This operation requires great care and knowledge of the anatomical relations, to avoid entering the cranial cavity.

Catarrhal disease of the frontal sinus arises from an extension of an acute rhinitis. The frontal sinus does not become fully formed until about the twentieth year; therefore, diseases of this cavity do not occur in early life. The symptoms are characterized by pain referred to the frontal region and supra-orbital ridge. Movements of the head, coughing or mental work increase the pain. Pressure under the supra-orbital ridge or at the internal angle is painful. This condition is usually relieved as soon as free drainage is established into the nose. Suppurative disease of this sinus is less frequent than similar trouble of the other sinuses just described.

The causes of empyema of the frontal sinus are traumatism, the presence of insects, tuberculosis, syphilis and polypi in the sinus or nasal cavity. If the infundibulum becomes closed, the symptoms are severe frontal pains, lancinating in character. This may be intermittent, leaving a sense of pressure in the internal angle of the orbit. These symptoms are frequently accompanied by fever and chills. Dilatation of the cavity may lead to symptoms of compression of the brain. A tumor may appear at the internal angle of the orbit, displacing the eye forward, downward and outward. If the pus does not find its way outward spontaneously or by surgical interference, it may pass through the thin posterior wall into the cranial cavity, causing death. Transillumination, by the aid of a small electric lamp, constructed so as to be placed at the under surface of the supra-orbital ridge, at the internal angle of the orbit, will assist in the diagnosis. The patient is placed in a well darkened room, and, in case the cavity is filled with fluid, the superciliary ridge will remain dark, while in health, it will become illuminated.

The treatment of the catarrhal disease should be directed to the inflamed nasal mucous membrane, and to the establishment of drainage through the natural cavity. This may be assisted by placing a pledget of cotton saturated in a strong cocaine solution, at the entrance of the infundibulum. In empyema, if removal of hypertrophied and polypoid growths does not relieve the trouble, an artificial opening must be made through the wall of the

sinus. This is best done by making an incision along the lower border of the supra-orbital ridge, extending to the root of the nose. Then, with a chisel or trephine, the sinus is opened near the inner angle of the orbit where the bone is thinnest. Granulation and diseased tissue should be curetted out. If the naso-frontal duct is closed, it should be opened by passing a trocar from the sinus into the nose.

The following case is one of *Traumatic Empyema of the Frontal Sinus*: J. L. R——, æt. 30, carpenter, was struck on the right brow by a falling hammer. He had occasional pains in that region, but no urgent symptoms until he presented himself for treatment about six months after the injury. He had been suffering intense pain in the region affected for two weeks. A hard tumor, about the size of a small hazelnut, could be felt just internal to the middle of the roof of the orbit. The lid was edematous and could not be raised; the conjunctiva was inflamed; the eye was pressed downward and outward. There was some pus discharged into the right nasal cavity. The nasal cavity was healthy, with the exception of inflammation in the vicinity irritated by the pus. An incision was made into the tumor, and about a half a drachm of pus was discharged. The cavity was washed out with peroxide of hydrogen (Marchand's) and packed with iodoform gauze. It was dressed daily, and at the end of five weeks, the secretion from the sinus and into the nose, had ceased, and the patient was discharged. About four months later the patient returned with all of his previous symptoms, pain, tumor, edema, etc. An incision was made down to the bone beneath the superciliary ridge, and considerable pus was discharged. A probe could be passed into the frontal sinus through an opening in the skull. With a sharp spoon and chisel, the diseased bone was removed, the cavity washed out with peroxide of hydrogen, packed with gauze and dressed daily, as before. The peroxide flowed freely into the nasal cavity. After two months' treatment, the patient was discharged cured.

In considering these diseases separately, we overlook a not uncommon condition found in patients who have suffered for a considerable time without proper treatment. This frequently results in several of the sinuses becoming involved. The pressure of the pus in the cavity causing absorption of its walls, and the trouble thus extending to the neighboring sinus. Thus, all of the cavities mentioned may become involved in the same patient. I recollect one patient in whom all of the sinus except the frontal were affected at the same time.

429 J street.

LESIONS RESEMBLING CUTANEOUS GUMMATA CAUSED BY METALLIC MERCURY, AND ACCOMPANIED BY PUS FORMATION.

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Read before the San Francisco Medico-Chirurgical Society.

The following case which occurred in the City and County Hospital of San Francisco, is of particular interest in connection with the work which has been done by Leber, Buchner, and others on the subject of chemotoxis and pus formation. It is worthy of notice, too, because of the peculiar characteristics of the lesion. I am indebted to Dr. H. S. Gossage, interne, for the following clinical history:

Robert McLeod, aged 21, a miner by occupation, was admitted to the Hospital April 14, 1894. He has had the usual diseases of childhood, and has since enjoyed good health. He denies ever having had syphilis. Two months ago while walking, gun in hand, about sundown, on the desert in Arizona, some distance from camp, he lost his footing and fell down an embankment twelve feet or more into a prickly pear tree. By holding the gun in front of him with both hands he saved his face from the thorns, but his hands and arms and legs were wounded by a thousand stinging points. The pain was so intense that he could not walk back to camp, so he lay half-stupefied where he had fallen until morning.

After daybreak with the greatest difficulty he regained camp, and there set about trying to relieve his suffering. His arms and legs had become frightfully swollen, and the pain almost unendurable. One of his companions suggested the application of quicksilver to the wounds, for he had heard of the use of mercury in medicine. The patient plunged his hand into a vessel of the mercury more as an experiment than anything else, and was gratified to find his pain immediately lessened. He continued to rub the mercury into his arms and legs for about twelve days. The swelling and pain in the legs subsided, but hard nodular tumors of moderate size remained. He is perfectly certain that these tumors are all situated at points where the skin was wounded by the thorns. This condition has persisted until the present time. The patient has suffered but little pain since the application of the mercury, and has enjoyed good general health, but he comes to the Hospital to have the unsightly tumors on his hands, arms, and legs removed. They are somewhat tender on pressure, and some of them have ulcerated in the center.

Examination shows on the arms, hands, and legs a large number of rather hard, irregularly-shaped swellings, sharply defined, and generally limited to the superficial tissues. They are movable over

the deep fascia, and are also movable, but to a less extent, beneath the skin. They vary in size from three inches in length and two in breadth down to mere points. The skin over some of them is normal, over others it is reddened, and is in places broken down. The ulceration is accompanied with but little discharge, and there seems to be no effort at granulation. Some of the ulcerated patches present a whitish appearance in the center. The man is fairly well nourished, though he says he is somewhat under weight. His teeth are not tender, nor have they been so. He has had no symptoms of salivation during these two months, and he had not worked with quicksilver for six years before going on this prospecting trip.

The tumors were quite uniform in elevation and gave to the touch the sensation of pseudo-fluctuation, as though they consisted of masses of gelatinous material, yet there was no evidence of fluid present. To a light touch they seemed soft, but to strong pressure they offered resistance. It was thought that these tumors were inflammatory in nature, and probably the result of encysting of the points of the prickly pear spikes. Yet no explanation of the peculiar appearance of those nodules whose centers had broken down and of the all but complete absence of pus offered itself.

Under chloroform a number of the tumors were incised and curetted. The contents gave a curious resistance to the sharp spoon; they seemed to be gelatinous, and yet were so exceedingly tough that only with the greatest difficulty could they be removed with that instrument. Generally it was necessary to use the knife or scissors.

The material removed consisted of a gelatinous substance of a peculiar yellow color. To the surprise of all present there appeared in it multitudes of shining globules. Some of these were an eighth of an inch in diameter, and rolled out on the table. A few of the globules were covered with a thin membrane or capsule. On examination it was evident that this material was metallic mercury. Had there been a homeopathist present he would have shouted for joy, for the tumors bore a striking resemblance to subcutaneous gum-mata, and lo! they contained and were presumably caused by mercury.

Nearly a teaspoonful of mercury was then collected from the scrapings of the half dozen or more tumors operated upon by a process resembling hydraulic mining; the material was crushed and placed in the bottom of a deep tumbler and this held under an open faucet. The stream of water effectually separated the material, the mercury collecting in the bottom of the glass, while the tissue floated off.

The lesions on the hands were most numerous and most extensive on the dorsal surfaces, though there were several nodules in the palms. In attempting to excise these tumors on the hands, it was necessary to make extensive dissections, for the yellowish material extended in long finger-like prolongations into the deeper structures of the hand, even to the interosseous muscles and the bones, and here it had to be cut out, for the curette would not touch it.

After keeping the patient under the anesthetic as long as it seemed advisable, the work was stopped, for it was out of the question to attempt to remove all the tumors at one operation. It was interesting to observe that those wounds from which the tumor masses had been completely excised, healed by primary intention, and that in those where bits of the yellow tissue were left, healing was prevented. More or less mercury could be squeezed out from these, even several weeks after the operation. Yet there was but little pus secreted from the open wounds.

On cutting through those tumors, which were excised *in toto*, with a sharp knife, the globules of mercury could be seen *in situ*, and their relations to the surrounding tissues made out. Most of them were exceedingly minute, but some were as large as small peas. Each tumor was surrounded by a small amount of fibrous tissue.

Examination of microscopical sections showed aggregations of large round cells with intervening trabeculae of fibrous tissue, and here and there areas of round celled infiltration, most marked about the blood vessels. These large round cells were most remarkable in their size. They may best be compared to the large epithelial cells found in the alveoli of the lung in broncho-pneumonia, which are there referred to as "catarrhal" cells. They were as large as these epithelial cells, but had small round nuclei, indistinguishable from the nuclei of the ordinary connective tissue round cells. They seemed to be swollen as if by imbibition of water. Now and then they contained granules of yellow pigment and in sufficient quantity to account for the yellow appearance of the mass already mentioned. No giant cells with multiple nuclei were seen.

Scattered throughout the mass there were large numbers of polynuclear leucocytes, and in places these were aggregated together in sufficient quantity to justify the term pus. The blood vessels which traversed the mass, and there were many of them, all showed numbers of these polynuclear leucocytes in their contents and in their walls. Since the particular tumor from which these preparations were made was covered by normal skin, and not connected with ulcerated lesions, it is all but established that the mercury was

directly or indirectly the cause of the attraction of the leucocytes to this region.

This formation of pus would go to confirm the results of Uskoff's experiments, repeated and confirmed by Orthmann, in which metallic mercury was injected into the tissues of animals, and which always resulted in the formation of pus.

Beside the polynuclear leucocytes there were observed numbers of red corpuscles free in the tissues—minute hemorrhages. Unquestionably it is the result of destruction of these that has given rise to the yellow pigment found in the large cells.

No gelatinous or caseous material, such as is found in the gum-mata, was present, so that the resemblance of these tumors to the syphilitic lesion is but superficial and ceases the moment the eye rests on the tissue under the microscope. Among the large cells there was seen, now and then, a minute globule of mercury (of course in making thin sections all but the most minute globules were carried away). No definite fibrous capsule was to be observed surrounding the individual globule, though in some instances the cells formed the walls of little hollow spaces, and were there matted together so that it seemed possible for them to adhere strongly enough to confine a globule of mercury, even after removal from the mass.

It is of interest to note that though the patient had shown absolutely no sign of mercurial poisoning before the operation, for several days after it he complained of a diarrhea. It is doubtful if this was due to disturbing the mercury in the tissues and to the absorption of some salt, probably an oleate, then formed, for after a second operation no such diarrhea occurred.

229 Geary street.

GUN-SHOT WOUNDS, WITH A REPORT OF SEVEN CASES.

By C. F. FOWLER, M.D., Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

Professor Longmore defined gun-shot wounds as "injuries which result from the action of missiles set in motion by a force which is derived from the ignition of explosive compounds." They comprise every kind and degree of injury from mere abrasions of the skin to shattering of bones and tissues and wounds of the internal organs and vessels of the body. The same authority states that out of 100 casualties of this sort there are 20 killed to 80 wounded, and that of the wounded, one-third are severe and two-thirds are light.

In gun-shot wounds of the extremities the surgeon is rarely at a loss as to the method of treatment to be prescribed, the extent of the

damage entirely visible and the course of the missile ascertainable.

In penetrating injuries to the head, the chest, or the abdomen, the degree of injury, the direction the projectile has pursued, and the depth to which it has penetrated, are often problematical, and the symptoms are the only guides to be followed. Extreme conservatism is often called for in the management of these cases. At the same time, in gun-shot wounds of the abdomen, the incontrovertible evidence of penetration of the bowel or of excessive hemorrhage, call for immediate and decisive action on the part of the surgeon, the mortality from penetrating abdominal wounds being too great when left to natural reparative agencies.

In gun-shot wounds of the chest, "hands off," with the exception of strict antiseptic attention to the point of entrance and of the point of exit, if there be one, is a fair rule to follow. Probing, if resorted to, should be done with great caution, and the point should be carried no further than to definitely ascertain the fact that the bullet has entered the chest cavity. This much is required, as deflection will sometimes occur, and the patient and his friends are sure to be persistent in eliciting from the physician whether or not the bullet has entered the cavity. Complete rest should be enjoined, the patient being placed on a light diet, and great care exercised that infection from without does not occur. All extraneous material, as bits of wadding, clothing, etc., should be removed, and the wound placed and kept in perfect antiseptic condition. This being done, nature will often perform miraculous cures in gun-shot wounds of the chest.

In presenting the following cases I have taken those that proved fatal as well as those that recovered, in order to show the difference in the mode of death from fatal wounds in different portions of the body.

CASE I.—J. S——, aged about 35 years, on July 13, 1894, while trespassing on forbidden ground, on Front street, between K and L, during the occupation of this city by the regular troops, received a gun-shot wound and was conveyed to the Receiving Hospital. Examination showed a very bad wound of the abdomen; the bullet, one of extremely large calibre, having entered at the middle of the left buttock and ranging inward and forward, emerged at a point midway between the pubes and the umbilicus, carrying with it a large amount of omentum and several coils of intestine. Another bullet entered the upper portion of the left scapula at the base of the neck and emerged above the collar bone. The abdominal wound was a fatal one, the patient dying about five hours subsequent to admission to the hospital. Death was due to extreme shock and exhaustion from loss of blood. Patient was conscious for some hours and beyond one request for morphine and an occasional demand for

water, made no particular outward sign of suffering. I am of the opinion that he would have survived the wound in the neck.

CASE II.—T. B——, aged 23, at the same time and place received a gun-shot wound of the right shoulder, the point of entrance being about 3 inches below the Acromion process, piercing the deltoid muscle in front and emerging about 4 inches from the spinal column behind—missing both humerus and scapula. Two fingers could be inserted into the point of entrance with ease. Under antiseptic treatment the wound healed readily, and the patient left town in three weeks.

CASE III.—J. M——, an Italian, aged about 25, was shot by a fellow-countryman and taken to the hospital for treatment. Examination showed a pistol shot wound; the point of entrance being $4\frac{1}{2}$ inches above the umbilicus, ranging in a straight line backward and to the right and emerging at a point intersecting a line dropped from the axilla. The bullet lodged just beneath the skin and was removed. The direction of the bullet indicating that the liver must have been injured, a guarded prognosis was given. The patient was removed to his lodgings and perfect quiet enjoined. No untoward symptoms occurred, and in three and a half weeks he was discharged.

CASE IV.—A. R——, German, aged about 30, on December 9, 1894, while riding in a cart with a companion, and holding a loaded shotgun between them, the gun was discharged, the load taking effect on the inner and anterior aspect of the right arm, close to the axilla, nearly blowing the arm from the body. All the large vessels and about 3 inches of the humerus were cut away and the member hung by a few pieces of the deltoid muscle. He was brought to the hospital, and, assisted by Dr. Geo. Ogden, the arm was disarticulated at the shoulder joint, and the patient was removed to his home. A tedious convalescence followed, due to a sinus which discharged for some time. His place of residence being on the outskirts of town, and the incessant rains rendering the roads almost impassible, it was found advisable to remove him to the County Hospital. He was finally discharged from that institution cured.

Considering, in this case, the gravity of the injury, the fact that the man was driven in a cart 10 miles over a rough road to the hospital, that over two hours was spent in getting the consent of the patient and his friends to an operation, and the gravity of the operation that followed, the result was all that could be expected.

CASE V.—D. W——, a barkeeper, aged 32, became engaged in a quarrel with a patron of the house and was shot with a pistol. The injury was received at Wheatland, about 1 A. M. on the 29th of April, 1895, and he was attended by Dr. Grant, of that place, until the morning of May 1st, when he was brought to Sacramento, where I saw him 30 hours after the shooting occurred. There was a wound in the right breast close to the sternum. Patient was suffering greatly from shock, skin cold and clammy, pulse weak, with marked dyspnea. Stimulation with whisky, heat to the extremities,

and a hypodermic injection of morphine ($\frac{1}{4}$ gr.), and atropine ($\frac{1}{100}$ gr.), brought about reaction and the patient rallied well. On the evening of the same day Dr. T. W. Huntington was called in. The pulse was then 132, the signs all pointed to early collapse and the friends of the patient were so advised. The next day the pulse was 140, temperature 103.5° , with extreme thirst. On the same day the bowels moved naturally. A discoloration, the size of the palm of the hand, manifested itself over the region of the cecum and gradually extended until it covered an area of about 10 inches. This discoloration soon began to fade and in 6 or 7 days had disappeared entirely. Pain was complained of over the same region, and in fact, this was the only seat of pain. Extreme jaundice was present, showing injury of the liver. Under the action of phenacetin the fever was reduced to 101° , and at no time rose higher, the drug apparently having a very beneficial action. Morphine was given constantly. The pulse remained at 120 to 135 until May 10th, when death took place. *Autopsy.*—Assisted by Dr. Hanna an autopsy was held. The point of entrance of the bullet was half an inch to the right of the sternum and 1 inch below a line drawn horizontally with the nipples. It pierced the sternum, passed entirely through the liver and entered the ascending colon, where it was found inside the bowel.

The points of interest in the case are, that the patient lived nearly 12 days from the time of the infliction of the injury, and the lodgment of the missile inside the bowel. Had an operation been performed, there is little doubt that it would have been a failure, as far as location and extraction of the bullet was concerned. Nearly two hours was spent in a vain search for it at the autopsy, and it was finally discovered by stripping the bowel between the fingers.

CASE VI.—M. A——, a colored woman, aged 34, received nearly the whole contents of one barrel of a shotgun, fired at a distance of 12 feet. The shooting occurred March 1, 1895, and was an attempt to murder. The person committing the assault immediately shot himself in the head with a pistol, causing instant death. An examination showed a large, ragged, contused wound of the left breast and side, filled with shot, wadding, pieces of steel from a corset, and shreds of clothing. A large portion of the charge had passed through the muscles overlying the ribs, making a sort of pocket some $3\frac{1}{2}$ inches in depth. The wound was cleaned as well as possible at the first visit, considerable quantities of shot and debris being removed. Two days subsequently, assisted by Dr. G. A. White, the pocket in the side was opened freely and a quantity of shot, wadding, etc., removed. At that time there was no indication that any of the shot had entered the chest cavity. The expectoration was natural, and ordinary respiration was painless. Considerable sloughing occurred and pus was formed in large quantities. The sloughing laid bare a section of two ribs, showing a small fracture of one. The wound was washed twice a day with peroxide of hydrogen (Marchand's) and covered with lint soaked in carbolized oil, with oiled silk and bichlo-

ride gauze as a covering. The external wound progressed favorable, but a persistent pyrexia gave rise to the suspicion that pus was being absorbed from some source, although deep inspiration and pressure failed to show it. Some 3 weeks subsequent to the receipt of the injury, while dressing the wound, I detected pus emerging from a pin hole opening between the ribs. From that time on pus welled out freely, being confined apparently to the pleural sac. An operation for removal of a section of rib in order to give proper drainage was advised, but strenuously opposed. Removal to the County Hospital being also refused, nothing could be done but leave the case to nature. In the latter part of May the left leg became partially paralyzed, and total inability to stand took place. Pain over the pit of the stomach and extending nearly down to the pubes was constantly present. In June, the discharge had considerably diminished; the legs commenced to regain their strength, and in many ways the patient was better. The temperature stood at about 101.5° F. At my last visit the wound in the side was $2\frac{1}{2}$ inches in circumference, healing going on very slowly. Some pus still oozed from the pleural sac and there was some fever. What the ultimate result in this case will be cannot be positively stated, but I think the chances for recovery are good.

CASE VII.—S. F——, a boy aged 9 years, on July 4, 1895, while picking up a toy cannon the weapon exploded, making a lacerated wound of the palm of the hand. The laceration extended from the base of the thumb around the outer aspect of the hand to the base of the little finger, the latter being amputated at the last joint. The wad passed through the waistband of his pants and penetrated to a depth of half an inch in the right side. The case progressed favorably until the evening of the fourth day, when he complained of twitching pains in the right side, and involving the outer surface of the thigh. The next morning I was hastily summoned and found the jaws of the patient locked, great restlessness, and occasional slight spasms of the muscles of the throat. A one-eighth grain pellet of morphine and atropine was administered, with directions to repeat it in three hours if necessary. No effect was obtained, and three hours after the second dose of morphine a single dose of 20 grains of chloral hydrate was given in the hope of mitigating the spasms which were not at any time of a character to be alarming. No apparent effect was produced by the chloral, and at 1:30 P. M. the patient was seized with a spasm of the laryngeal muscles, and died in a few minutes.

According to the figures, as given by Poland, the mortality from trismus is very high, if occurring before the tenth day. Out of 130 cases 101 died. Trismus is defined as a spasmodic affection produced by reflected irritation set up by a local disease; it is rarely associated with any constitutional disturbance, and is, for the most part, cured on the removal of the cause. In the present state of our knowledge of this disease the toxic agent producing the peculiar train of symptoms that ensue upon the receipt of injuries, such as described in the last case, pathological research has as yet failed to

reveal. That the toxic agent, whatever it may be, exerts itself upon the spinal cord, and medulla oblongata is accepted by most authorities. It is supposed that in cases of traumatism the poison is introduced into the system through the wound from the soil or other extraneous matter. Idiopathic tetanus frequently occurs without any known cause, the symptoms and course of the disease being in every way similar to that of the traumatic variety. The close analogy existing between this disease and the effect of strychnine on the nerve centers has led to the belief that strychnine and the toxic agent of tetanus exert their influence on the same centres.

606 J street.

CODEIN IN THE TREATMENT OF THE MORPHINE HABIT.

By LOUIS A. KENGLA, M.D., San Francisco, Cal.

In September, 1893, I was called very hurriedly to see a man who was reported to be dying. On reaching his bedside I found a young man, 28 years of age, pale, thin, and of a seemingly well-marked cachexia. He was suffering considerably, greatly alarmed, and anxious. A short while before he had made preparation for his usual evening walk, when, having gone a few steps from the house, he was seized with an agonizing pain in the left side of his head.

Upon questioning him as to the cause of his sickness, he finally admitted that he was a victim to the morphine habit. That evening he had taken an injection of 7 grains of morphine, to which some cocain, probably 2 grains, had been added. Upon reaching the sidewalk he had been attacked with pain of so severe a character that he supposed it would prove fatal. Having satisfied myself that there was no cause for apprehension, I so assured him, and ordered some medicine to be taken during the night. The following morning I found the patient in his usual health; he expressed a strong desire to be cured of the debasing habit, and said he would undergo any treatment that might be necessary. I left him with the understanding that he would call at my office the following evening, when arrangements would be made for his treatment.

Much to my surprise he promptly presented himself, when I ascertained this history: Ten years ago a change of residence to a southern town in this State had been followed by an attack of diarrhea, due no doubt to the change in climate and water. To relieve this he had taken several doses of Squibbs' mixture, with temporary relief. On a return of the trouble he would resume the use of the medicine. After several weeks of more or less constant use of this remedy a druggist told him that opium would do him as much good, and would be less injurious.

When his diarrhea was cured he found it impossible to get along without the stimulant, and he continued to eat opium until thoroughly disgusted with this manner of using it. About this time he met with an accident, by which his tongue was severely lacerated, preventing him from eating anything. To satisfy the craving for the drug, and to relieve pain, a friend advised him to take a hypodermic of morphine, administering an injection, and for the next nine years he had faithfully followed this example. He had taken as much as 40 grains during the twenty-four hours on many occasions. Frequently he had reduced the daily dosage to 7 grains, but on feeling the effects of the withdrawal of the drug had invariably gone to the opposite extreme in renewing its use.

Realizing the utter disregard of truth exhibited by most habitues, I was surprised when he presented himself at my office, and, after some discussion, I allowed him to administer his usual dose of $7\frac{1}{2}$ grains, and then demanded the surrender of his syringe and all his medicines. The treatment usually laid down in the text-books had been tried and had failed. Similarly all the nostrums advertised for this condition had been unsuccessfully employed. He had even been an inmate of one of the State institutions for three months, but had immediately relapsed on his discharge; I therefore felt that the case was one of unusual difficulty, and having read some years ago in the *New York Medical Journal* a report of a case of morphine addiction cured by the substitution of codein, I determined to try this plan. I gave him to understand that he must submit implicitly to my orders, and that he must not take medicine of any kind except such as I would give him. To all this he willingly assented.

On the first evening I gave him a hypodermic injection of 5 grains of morphine. He was given four half grain tablets, two to be taken in the morning and two at noon of the next day. My instructions were followed, and at his visit in the evening, I gave an injection of 4 grains and 4 tablets to be used on the third day. On that evening I gave an injection of 3 grains. I now substituted one-fourth grain tablets for the one-half, and allowed two after breakfast and two at midday, with the request that if he could omit the dose at noon, he should bring me the medicine. This he failed to do. In the evening two grains were administered hypodermically. On the fifth day I gave him 4 one-half grain tablets of codein, with the same instructions as on the preceding day. The temptation was more than he could stand, and at his call he received 2 grains of morphine. For use on the sixth day I allowed him 2 one-half grain tablets of codein, one for the morning, the other for noon. The same evening I gave him one-half grain of morphine hypodermically.

On the seventh, finding that he stood the reduction very well, he received one-half grain of codein for his daily doses, and 2 grains were administered hypodermically at night. On the eighth, the same amount was given for his own administration, but at 2 P. M. he called at my office greatly excited, nervous, and depressed, saying that I had reduced his medicine too rapidly, and that he was unable to bear his sufferings. I argued the matter with him, gave such encouragement as I could, and injected 1 grain of codein. He left bright, happy, and contented. On his return in the evening, he received 2 grains with the syringe.

From this day I gradually reduced the medicine, omitting the tablet first at noon, then in the morning, until another week had passed, when his hypodermic dose was reduced to a fraction of a grain, which was given more for effect than for any influence that could possibly be derived from such an amount. Hypodermics were administered after this fashion for several weeks, when he was told that he had not received any morphine since the first week of treatment, and that it was absolutely useless to continue puncturing his arm for the sake of injecting so much water. He appeared dumb-founded. He said he did not believe me and could not; that it was impossible to cure him without more suffering. Only on two occasions had he felt the loss of the drug. When in the State institution his agony was terrible; the torture due to the withdrawal of his accustomed dose was piteously unbearable, and during the whole period of confinement his pain was most severe.

He could not realize his position now. He was like a freed bird. It seemed almost a dream, and to this day he marvels at his easy and almost painless disuse of the opiate. He has never had the least desire to return to his habit, and, in fact, dreads the thought of it, especially when he recalls the very many narrow escapes from death. I have seen him very frequently under various circumstances, and have never even suspected him. I have examined his body many times for needle punctures, but there has never been the slightest trace of one. In every respect he is now another man. His only complaint is occasional palpitation.

While under treatment I questioned him frequently as to the difference in effect of the drug used and the morphine. His invariable reply was that whatever the medicine, it had a more quieting effect; it did not leave him drowsy and stupid, but soothed every nerve, took away the "gone" feeling and the unbearable craving.

The effect of the morphine when he first began its use, especially hypodermically, was like a dream—sweet, peaceful, and full of grandeur. After a few years the dream was gone. To satisfy the crav-

ing was his sole effort. Finally, the only consolation came in the drowsy, heavy, listless stupor of large doses. The most predominant thought, and the cause for most uneasiness while under treatment, was how he could do without the stupor; how to tide over the times in the evening that usually had been given up to this void, almost inanimate, condition! Though the amount of medicament in the injection was very small toward the last, I am sure it had more than a moral effect, for I have substituted water in cases of habitues treated for other disease, and was invariably promptly informed that it was very queer morphine.

Were I to undertake the cure of another case, unless the amount of morphine taken was quite large, I would substitute codein on the second day, but still only slowly leave off the drug.

My patient suffered so little and seemed to be so unable to realize that his stimulant had been withdrawn, that I would urgently commend the drug in similar treatment. The only other medicine used was the syrup of the phosphate of iron, quinine, and strychnine for tonic purposes.

In looking up the literature of the subject at my command, I cannot find any reference to the use of codein, except in the article mentioned, and in Skene's recent work—"Medical Gynecology"—where it is stated that its use is highly commended by so excellent an authority as Dr. J. B. Mattison, of Brooklyn.

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DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M.D., Sacramento, Cal.,

HENRY GIBBONS, JR., M.D., Professor of Obstetrics and Diseases of Women and Children, Cooper Medical College, San Francisco, Cal., and

WM. FITCH CHENEY, B.L., M.D., Adjunct to the Chair of Obstetrics and Diseases of Women and Children, Cooper Medical College, San Francisco, Cal.

Some Good Rules for Infant Feeding.—The Board of Health of Newark, New Jersey, issues a circular for the benefit of mothers, to prevent disease among infants, and sends a copy of this circular to every family in which a birth is reported. It contains much good advice on artificial feeding, the proper care of milk, and the hygiene of the nursery. The following rules are selected as of special value: "Never put a bottle nipple into your mouth and then into the baby's mouth; this will often prove dangerous. Feeding in the night, after the third month, is both inconvenient and unnecessary; sleep at night is better than food. Do not feed the baby because it cries; this may be due to pain, and it is hurtful to fill an infant's stomach at such a time. Have a rule for feeding the baby, and do not vary from it; without regularity the mother becomes a slave. More infants' lives are taken by over-feeding than by starvation. An infant's thirst is not quenched by milk; it needs clean water to drink with regularity. Plain boiled water, given between feedings, will often

aid the digestion and satisfy the child when restless." The entire circular is published in the *Archives of Pediatrics*, July, 1895.

Symphiseotomy.—The operation is indicated where the deformity of the pelvis is such that there is but little chance of delivering a living child by the application of high forceps, or version, or where there is some obstruction to the delivery from a solid intra-pelvic tumor. The danger is primarily sepsis. The operation at term is more favorable to the child than induced labor, for the fetus is older and better able to withstand the shock of delivery. It is safer for the mother than cesarean section, and equally safe for the child. Before performing a symphiseotomy, it is imperative that the operator should calculate and know exactly what he expects to accomplish. The operation does not mean simply a division of the symphysis, but implies a previous careful calculation of the exact increase in size of the pelvic bony canal to be obtained after the pelvic bones have been separated to their greatest extent.—*American Medico-Surgical Bulletin*.

The Danger of the Employment of the Fillet in Delivery.—A case was presented to the Society for Obstetrics and Gynecology, in Paris, by BAR and TISSIER, of a child two years old, that was born by the breech and extracted by means of a fillet. The extraction was difficult, and after the birth there was noticed an abrasion of the skin, but this soon healed. But when the child learned to walk it was lame, in consequence of a shortening of the femur in its upper third. In the discussion that followed presentation of the case, CHARPENTIER said he considered the shortening due to a fracture of the upper part of the thigh, as he had experienced in a similar case. PORAK thought it could not have been a fracture, for there was no callus to be felt. BUDIN advised that in extraction one should pull only during the pain, while at the same time pressure on the uterus was made from without. Porak was of the same opinion, and if possible he draws a loop through each groin, or puts a blunt hook in the second, to divide the pressure. DOLÉRIS thought that in the case presented the shortening of the limb was to be attributed to an atrophy of the femur, and this again to trophic disturbance of the nerves, particularly of the circumflex. OLIVIER recommended surrounding the fillet with rubber tubing so as to relieve the pressure upon the child.—*Gazette Medicale de Paris*, No. 10, 1895.

SURGERY AND ANATOMY.

By T. W. HUNTINGTON, B.A., M.D., Surgeon Southern Pacific Company's Hospital Sacramento, Cal.,

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GEO. B. SOMERS, M. D., San Francisco, Cal.

Method of Restoring Persons Apparently Dead from Chloroform.—DR. MAAS describes a method which is a modification of König's. König's method was to have the operator stand on the patient's left side, facing him, the open hand on the patient's chest with the ball of the thumb between the apex beat and sternum. Then, at the rate of 30 times to the minute, the chest wall was pressed in with a quick strong movement. After some experience with this method Dr. Maas modified it by increasing the frequency of the movements to 120 to the minute. In a case cited, Sylvester's artificial respiration was tried with the head lowered and the tongue pulled out, but without result. There was no heart impulse, no respiration, body pale and cold, eyes shrunken, pupils

dilated, and froth appearing at the mouth and nose. The above method was tried for fully three minutes when a slight gasp was heard; this was followed by a gradual return of the heart beats, and finally the patient recovered. On a fresh cadaver a distinct pulse-wave can be felt in the carotids on forcibly and quickly compressing the precordium, and the pupils will be found to contract as the blood fills the iris capillaries. Although the method is easier upon the flexible walls of a child, age does not prevent its use. Provision must be made for the free passage of air to and from the lungs.—*Kansas Medical Journal*, May 25, 1895.

Treatment of Wounds.—The following paragraphs are taken from an address by SIR GEORGE HUMPHREY: "In the treatment of a wound, therefore, there are two main points to be attended to: first, to endeavor to reduce to a minimum, the media upon which the organisms act; and secondly, to reduce to a minimum the organisms themselves. Either of these would suffice, if effectually carried out; but, as we cannot be certain of fully accomplishing either, we resort to both. By careful securing of vessels and careful pressure upon the region of the wound we endeavor to prevent oozing and accumulation in the wound, and by the antiseptic agencies we endeavor to prevent the accession of microorganisms. By a successful employment of these means, the opposed surfaces are kept in contact, and, there being nothing to interfere with the natural process of union or healing, this takes place almost invariably. We have indeed, thus at length attained to the desideratum which I spoke of in this place many years ago, and do now succeed in preventing the interferences which for ages barred the successful treatment of wounds. Among the advantages which may be mentioned as resulting from this better treatment of wounds, are: (1) The diminution of the risks of secondary hemorrhage which was often the result of ulceration of the tied vessels consequent on the septic hemp ligatures we formerly used. (2) The infrequency of the various indications of general blood poisoning and erysipelas, which is, undoubtedly, the greatest benefit which the antiseptic treatment has given. (3) I would mention the less frequent occurrence of tetanus. This terrible malady may manifest itself at any period in the healing of a wound. The quicker, therefore, the wounds heal, the less time and opportunity is there for the formation and introduction into the system of that peculiar poison, probably of organismal character, which concentrates its evil influence on the neuro-motor system.—*British Medical Journal*, March 30, 1895.

OPHTHALMOLOGY, OTOTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M.D., Sacramento, Cal.

Insufficiencies of the Ocular Muscles.—DR. J. WALTER PARK formulates his conclusions from his experience with insufficiencies of the ocular muscles as follows: (1) Following up one's cases for one or two years is necessary, and should be done in all muscular insufficiencies to tabulate results for publication. (2) Those cases involving the recti muscles, occurring in hyperopia and compound hyperopic astigmatism of from $\frac{1}{2}$ to 15° , combined with errors of refraction, will generally do well with their refractive errors corrected, muscular exercise, out-door life, tonic treatment and temporary use of prisms. (3) Those occurring in myopia and compound myopic astigmatism require the use of prisms more constantly, and are not benefitted quite as much by muscular exercise as those occurring in hyperopia, etc. Tenotomies, with advance-

ments, are generally more effective than in hyperopic cases. (4) Those occurring in constitutional, paralytic and reflex causes require plenty of rest, out of door exercise, the temporary use of prisms, electricity and general tonic treatment. (5) Tenotomies are not necessary in most cases, and should not be done until all other remedies fail. (6) There are some cases of esophoria of slight degree of deviation that require nothing but rest and out-door exercise to effect a cure.—*Refractionist*, June, 1895.

The Surgical Treatment of Tubercular Laryngitis.—DR. J. W. GLEITSMANN says that the contraindications to surgical treatment of tubercular laryngitis are advanced lung disease and hectic, disseminated laryngeal tuberculosis leaving little or no area of healthy tissue, and extensive infiltration producing stenosis. Under the latter condition, tracheotomy is indicated. The claim that curettement hastens the pulmonary disease, is not supported. Hemorrhage, which, in any considerable amount, is rare, can be checked by a mixture of lactic acid and ferric chlorid solution. Pain is avoided by the repeated use of a strong cocaine solution. Curettement is likened to the excision of a tuberculous joint. It removes a focus of infection which is a constant drain upon a weakened system; and in properly selected cases, is the best procedure at our command. The indications for the operation are as follows: (1) Primary tuberculous disease without lung complication. (2) Cases with concomitant lung disease, either incipient or which has stopped short of softening or hectic. (3) Especially circumscribed ulcerations and infiltrations. (4) Dense, hard swelling of the arytenoid region, ventricular band, posterior wall, tubercular tumors, and affections of the epiglottis. (5) In advanced lung disease with distressing dysphagia from arytenoid infiltration. Post operative quiet is absolutely necessary. Lactic acid or pyoktanin, 1 or 2 per cent., should be applied daily, until cauterization is complete. This occurs in from one to five weeks.—*Medical News*, July 13, 1895.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M.D., Sacramento, Cal.

Tuberculosis in Syphilitics.—M. JACQUIMET says: It is quite frequent to see pulmonary troubles complicate those of syphilis. These complications have been long recognized, as Ambroise Paré speaks of them, but their nature has been questioned. Some thought that there was a lesion due really to the syphilis, others regard it purely and simply as phthisis. It has been shown that the pulmonary lesions occurring in syphilitics should be attributed to two different causes: one of a true syphilitic nature, which, therefore, should receive the antisiphilitic treatment, the other enters the body with tuberculous manifestations. M. Jacquimet proposed to study the evolution of pulmonary tuberculosis in syphilitics. If the syphilis exists in individuals already attacked by pulmonary tuberculosis, it aggravates the latter and increases it. If, on the contrary, tuberculosis develops in a syphilitic, it proceeds in two different ways: it develops very rapidly if the syphilis is in its secondary period, and, on the contrary, it proceeds slowly and torpidly if it arises in the tertiary stage. Syphilis plays a double part in regard to the tuberculous bacillus. In weakening the system it permits the developing of the bacillus, and, on the other hand, by the lesions of the pulmonary apparatus, it permits inoculation of the tubercle bacillus. As to the pleurisies of the secondary period of syphilis, which have been recently described, M. Jacquimet agrees with his master, Landouzy, that they are of a bacilliary nature. The diagnosis between pulmonary syph-

ilis and pulmonary tuberculosis in syphilitics can only be made by bacteriological examination of the expectoration. As a conclusion to this interesting study, the author cites the words of Prof. Landouzy: "In the infectious group there is none worse, none so formidable, as the combination of syphilis and tuberculosis."—*Union Médicale*, June 1, 1895.

Syphilis, with Addisonian Syndroma.—J. LACAZE reports the following case: A young man, previously healthy, acquired an ulcer. As the secondary appearances were very trifling he did not undergo any special treatment. Six months after the infection appeared he was attacked with symptoms of morbus Addisonii. After a long period of unsuccessful mercurial treatment a second course was commenced. In a short time a general breaking down appeared, and the patient died in the fifteenth month after the first appearance of the infection. An autopsy was not made. The author asserts that the symptoms of Addison's disease in this case were the result of syphilitic infection, and he therefore draws the conclusion that morbus Addisonii belongs to the parasymphilitic diseases. The reasons given for this assertion are flimsy and weak; the only possible proof, according to statistics, comes from one other case in which, seven or eight months after syphilitic infection, brown spots appeared on different portions of the body, "allowing us to believe it to be almost Addisonian disease."—*Centralblatt f. innere Medicin*.

Syphilis in Physicians.—One of the most interesting forms of syphilis is that which is propagated by the medical profession. The contagion of syphilis in our practice can be conveyed either by the doctor to the patient or *vice versa*. The contagion through the physician to the patient can, in itself, be divided into three groups, according to whether it has taken place through his hands, his instruments, or by the transportation to a healthy organism of foreign substances from a syphilitic subject: (1) *Contagion by the hands*.—This mode of contagion is by the fingers of the practitioner. Digital contagion is produced when the doctor, having his fingers tainted by the excretion of a syphilitic ulcer which he has just examined, examines a raw surface such as a cutaneous or mucous wound, eczema, or psoriasis, or even when he brings his fingers in contact with a healthy mucous surface, as often happens in examining the rectum or mouth. Digital contagion can also occur when the physician continues to practice with syphilitic wounds, unhealed and insufficiently protected, such as ulcers, paronychia, and erosive syphilides of the hands. Hutchinson reports the case of a physician, attacked with an ulcer on the index finger of the right hand, who transmitted the syphilis to a young woman troubled with hemorrhoids, in examining the rectum. Some weeks after, an ulcer appeared at the top of a hemorrhoidal tumor. Another physician, also attacked with a syphilitic wound on the index finger, gave her two ulcers in examining the vagina. This mode of contagion often attacks a great number of people in such a way as to appear like a veritable epidemic. In the eighteenth century raged the epidemic known as the "Disease of St. Euphemia." This epidemic originated from the syphilitic finger of a midwife. According to the report of Jean Bailière, more than fifty pregnant women were at first directly contaminated; then the disease was transmitted from the women to their infants, to their husbands, and to the nurses, so much so that within the space of three or four months there were not less than eighty persons contaminated. In 1874, in the little town of Brives, there appeared a similar epidemic, reported by Dr. Bardinet to the Academy of Medicine. A midwife, with syphilis on her finger, contam-

inated more than one hundred victims. One of those women who often take the place of monthly nurses in certain little villages, had the habit of wetting with her own saliva the wound resulting from the severing of the umbilical cord in new-born infants. One day she accidentally contracted syphilis, quite unknown to herself, and, continuing this very strange habit, she transmitted the horrible malady to a great number of children.—*Journal de Médecine de Paris*, June 2, 1895.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M.A., M.B., C.M., Professor of Clinical Medicine, University of California, San Francisco.

The Direct Effect of Bicarbonate of Soda on the Gastric Secretions.—Sometime ago N. REICHMANN undertook the determination of the value of alkalies and alkaline waters in the treatment of gastric affections, and selected bicarbonate of soda for his experiments. In the first series patients took, on an empty stomach, and for several days during the early morning, alternately, distilled water and alkaline solutions. After 15 to 30 minutes the gastric contents were abstracted, and in the whole of the 57 cases neither weak nor strong doses appeared to produce any effect on the gastric secretions. Secondly, when administered while digestion was in progress a considerable diminution of acidity resulted, the reduction being proportionate to the amount of soda taken. When taken on an empty stomach daily, and for lengthened periods, no increase of gastric secretion was observable. The second experiment, when similarly extended over four to eight weeks, gave no different results. The outcome of the whole 103 experiments was to show that bicarbonate of soda in no way influences the gastric secretion or secretory power of the stomach, though it is able to neutralize or even render alkaline the contents; while the author thus claims to be in opposition to the acknowledged teaching of the text-books, he does not wish to condemn alkalies as being useless from a therapeutic point of view. Their power to diminish acidity is of itself valuable, and he acknowledges beneficial effects on the gastric mucous membranes as the result of drinking weak alkaline waters.—*Practitioner*, June, 1895.

The External Application of Pilocarpine in Nephritis.—DR. HUMBERT MOLLIÈRE has made some researches on the value of pilocarpine applied externally in cases of nephritis. The treatment consists in rubbing into the skin an ointment composed of white vaseline (100 gm.) and nitrate of pilocarpine (5 to 10 centigrammes,) and then covering up the part with cotton-wool and securing with bandages. The patient usually experiences a feeling of comfort, dyspnea abates, and respiration becomes more regular, and only in very rare cases is the treatment badly borne. Perspiration quickly occurs and is very profuse in spite of the small quantity of alkaloid used, and at the same time there is abundant diuresis corresponding to the time of the pilocarpine applications. All varieties of nephritis have been treated by this method, but the best results have been obtained in acute cases, where the albumin has often quickly disappeared, and a general amelioration of symptoms rapidly takes place, these good results being chiefly attributed to diminished congestion caused by the drug. Less favorable cases are those in which the cardio-vascular system has become affected. Where actual uremia has set in, this method is not so satisfactory, but it is found to be successful if applied after the more pressing symptoms have been relieved by more energetic methods. The physiological action

of pilocarpine when thus applied is found to be almost entirely local, and does not cause excessive secretion of the salivary and other glands, as it does when given by the hypodermic method.—*Lancet*, July 6, 1895.

Chloralose as a Hypnotic.—MARNDON DE MONTYEL condemns chloralose as a hypnotic for general use in the treatment of alienation. He admits that it generally exerts a certain, though variable, amount of hypnotic action, but the patient very rapidly becomes habituated to the drug, which then ceases to have any effect. The only cases in which he found chloroform to be really useful were cases of epilepsy complicated by insomnia, where the drug not only appeared to produce sleep, but to cut short the duration of the period of excitability. The dose given was from 25 to 50 centigrammes nightly until the crisis appeared to be over.—*British Medical Journal*, June 29, 1895.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M.D., Professor of Pathology, Cooper Medical College, San Francisco.

The Bicycle.—In a paper read before the London Medical Society, DR. B. W. RICHARDSON held that bicycling when practised in moderation by individuals with healthy hearts can be recommended. A heart lesion is, however, no contraindication to its use, as bicycling is of value in weak heart action, or in beginning fatty degeneration. Exercise under circumstances of that kind by increasing the work of the heart and promoting the circulation of the cardiac muscle will only serve to strengthen that organ. Excessive exercise will enlarge the heart and conduce to hypersensibility of that viscus, which if long continued results in diminished arterial pressure and degenerative structural changes in the organs. Nervous persons who traverse frequented thoroughfares only increase their nervousness. Atheroma and aneurism are contraindications. Venous stasis and anemia are benefited, SANSOM recommended moderate bicycling as an important factor in the treatment of valvular cardiac lesions after the methods of Oeertel.—*Münchener med. Wochenschrift*. [Personal observations demonstrate that the danger of the bicycle menaces the pedestrian more often than it does the rider. The fact is, that no out-door sport of the present century has done so much in exterminating the diseases of sedentary life as has cycling. In accordance with theory the supposition is plausible, that after a brisk ride on the bicycle, the body temperature is elevated. If the temperature, however, is taken, the phenomenal fact is revealed that not only is there no elevation of temperature, but that a reduction is present. Cyclists should bear this paradox in mind. By so doing they will avoid neuralgia, muscular rheumatism, and other affections consequent on sudden cooling of the body.—A. A.]

An Important Sign in the Diagnosis of Pericarditis.—DR. ALDRED WARTHIN directs attention to accentuation of the pulmonary second sound as an important symptom in pericarditis. He presents the clinical histories of 5 cases in support of his position. The symptom began early, continuing through the course of the disease, disappearing finally only after all other signs had ceased. This symptom is not referred to in the text books. As the majority of cases reported are those in which effusion has taken place, the chief notice taken of the heart sounds has been in regard to their weakness, and in only a few of the cases without effusion is there any mention of accentuation of the second pulmonary sound. The only notice taken of the diagnostic

value of this sign is in the report of the French Congress of Internal Medicine, held in Lyons, last October. Under the head of "Les Signes de la Pericardite Aigue," M. Josserand, of Lyons, makes the following statement, which is quoted in its entirety: "In pericarditis the friction sound is often not heard until some time after the pathologic change has begun, and Stokes asserted that it did not exist in the early stages of the disease. When, in the course of acute articular rheumatism, one auscultates comparatively the base of the heart in the aortic and pulmonic areas, it will sometimes happen that the second sound in the latter place will be found to be much more intense, more ringing, almost clangorous, the inverse condition of that found in chronic aortitis, when the second sound is more exaggerated to the right of the sternum than to the left. This difference is often appreciated by palpation. This sign should lead one to search carefully for friction sounds; if not found, their appearance may be predicted. This accentuation of the pulmonary sound occurs early, and is often very transitory; it precedes the appearance of the friction by from 1 to 3 days. This sign belongs to the initial congestive period, like the crepitant rale in pneumonia. The pathogenesis of the accentuated second sound is most probably the following: In acute pericarditis the friction sound is most commonly heard along the left border of the sternum and in the pulmonary area. It is probable that the subjacent heart muscle is itself congested, and this part of the myocardium covered over with a deposit of fibrin increases the sound of the pulmonary valves, which are in close proximity."—*Medical News*.

Hematemesis.—PROF. EWALD, as a result of his observations formulates the following conclusions: (1) Hemorrhage from the stomach is more frequent than the vomiting of blood. When stomach hemorrhage is suspected, it is important, when vomiting is absent, to examine the stool, and then it is only possible to demonstrate the presence of blood by careful microscopic, spectroscopic or chemic examination. (2) Dark black brown coloration of the stomach contents indicates, in many, but not all, cases, the presence of blood; therefore, mere inspection of the stomach contents is not always positive in indicating hemorrhage of the stomach. In doubtful cases, spectroscopic, chemic or microscopic examination is necessary. (3) The positive results afforded by the guaiacum test do not always show the presence of blood; the negative result of this test, however, excludes blood. (4) The examination of the suspected stomach contents with concentrated acetic acid and ether, and the treatment after this manner of the ethereal extract with tincture of guaiacum and turpentine, constitutes the quickest and most positive test for the presence of blood. (5) Hemorrhage of the stomach often occurs periodically in connection with menstruation and its anomalies, and is best specified as "menstrual hemorrhage of the stomach." Periodical hemorrhage of the stomach in connection with amenorrhea stands in genetic relation to this menstrual anomaly. It must not, however, be regarded vicarious in the sense that gastric hemorrhage is a physiological condition substituting menstruation. (6) Gastric hemorrhage in *ulcus ventriculi* often occurs periodically and bears a certain relation to menstruation. (7) Menstrual hemorrhage of the stomach must awaken the suspicion of a latent gastric ulcer. In such a case a typical rest cure of Leube is indicated; the futility of such treatment contraindicates the diagnosis of gastric ulcer.—*Wiener Med. Presse*, March 17, 1895.

Some Facts Relative to Diabetes.—TESCHENMASHER (*Deutsch med. Woch.*) refers to certain anomalies in diabetes mellitus. He mentions a case of

glycosuria without polyuria, in which large quantities of sugar were present in the urine, the so called *diabetes decipiens* of Frank. He relates the history of a woman, 60 years of age, who came to him for eczema of the genitalia which was rebellious to all treatment, in whom the quantity of urine voided in 24 hours, oscillated between 1,000 and 1,100 c. c., and contained 12 per cent. of sugar. In this case no polydipsia was present. Under treatment, the glycosuria commenced to diminish and the quantity of urine excreted augmented parallel with the disappearance of the sugar, attaining the normal when the sugar had completely disappeared. The author invokes such cases as an argument to controvert the theory of Vogel, which explains the diabetes polyuria by an increased absorption of water from the tissues by the blood surcharged with sugar, thus augmenting ultra-vascular pressure and diuresis. The presence of diacetic acid in the urine is usually regarded as an unfavorable prognostic sign. He accepts this view and maintains that he has encountered this substance in juvenile diabetes. He believes that its value in prognosticating diabetic coma has been greatly exaggerated. The author has observed the presence of diacetic acid in many diseases as well as in diabetes without subsequent coma. Furunculosis and caries of the teeth are frequent indicatory symptoms in diabetes. Cases presenting such symptoms should have the urine repeatedly examined for sugar, as the sugar is often intermittently present in the urine. The author confirms the observation of Unschuld, that cramps of the calves is a frequent phenomenon of diabetes. The author has further observed, as an initial symptom of diabetes, obstinate catarrh of the stomach.—*Semaine Médicale*, May 1, 1895.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M.D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

The Influence of Alcohol on Sexual Perversion, Epilepsy, and other Physical Anomalies.—It is the opinion of DR. AUG. FOREL that the excessive use of alcohol may not only produce the ordinary alcoholic psychosis and dipsomania, but it may stimulate or develop directly any latent psycho-pathological germs that might otherwise have remained latent. In the etiology of sexual perversions we find the main factors to be congenital and acquired dispositions, acquired nervous or mental disorders, and, in some cases, bad habits. Alcohol is not mentioned as a causative factor. Dr. Forel has, however, observed cases in which the use or abuse of alcohol was a most prominent feature. It is an established fact that epileptics stand alcohol very badly, and when intoxicated are especially dangerous. There is also an alcoholic epilepsy, the subjects having fits only when intoxicated. The author calls attention to the amnesia which frequently follows various intoxications, and concludes that nearly every psychosis is aggravated by the use of alcohol. Other psychoses caused or kept up by alcohol are alcoholic mania, melancholia, pseudo-paralysis, incurable secondary dementia, acute and chronic hallucinatory folly, etc. Dr. Forel claims to have seen many cases cured by abstinence, and considers indulgence one of the greatest obstacles in the radical cure of morphino-mania. He had always observed that the excitement of the insane in asylums was always greater after entertainments, at which wine or beer was served. At Bürgholzli, of which Dr. Forel is superintendent, alcoholic beverages have been replaced by milk and lemonade. He commends following the example of the

London asylums and that of Dr. Krapelin in Heidelberg, in prohibiting the use of alcoholics.—*Deutsche med. Wochenschrift—Journal Nervous and Mental Disease*, May, 1895.

Unilateral Disturbance of Respiration in Cerebral Paralysis.—GRAWITZ found that difficulty of respiration was absent in only 7 out of 30 cases of hemiplegia. In 6 out of the 7 cases the patients were women; all recovered, relatively, rapidly and completely. The respiratory disturbances observed were visible. In 2 cases typical Cheyne-Stokes respiration was present; in 2 others there was very marked diminution of respiratory movement and capacity on the paralyzed side. This diminution was noticeable, not alone on forced respiratory movements, but during tranquil breathing. This diminution seemed to consist, in some cases, of a retardation of the beginning of inspiration and a premature cessation of expiration. In one case of left-sided hemiplegia there existed a limitation of respiratory movement on the opposite side of the thorax, the respiratory movement being much more energetic on the left side than on the right. It would seem that the respiratory disturbance outlasts the paralysis of the members by several weeks or months where recovery takes place. These complications are of too long duration to be due to an exertion on the respiratory centers by cerebral arrest.—*Zetschr. f. klin. med.—Journal Nervous and Mental Disease*, June, 1895.

Hematoporphyrin in the Urine due to the Administration of Trional.—DR. ERNST SCHULTZE, of Bonn, to whom we are indebted for the introduction of trional as a remedy in the treatment of psychoses, has recently reported the first case of trional intoxication. The patient, a woman, 54 years of age, suffering from melancholia, took within about a month 24-25 gm. (3vj) of trional. She became more and more emaciated, refused to take nourishment, suffered from obstinate constipation, frequent collapse, epigastric pains, vomiting. When in this condition she was removed from the hospital by her relatives, soon after dying at her home. A *post-mortem* examination was not permitted. A few days before her death the urine was noticed to be of a peculiarly red color, which, upon chemical and spectroscopical examination proved to be due to the presence in the urine of hematoporphyrin. As hematoporphyrinuria has frequently been observed after the use of sulphonal, it is not to be wondered at, that trional, so closely allied to sulphonal, should have the same effect. The red color of the urine is a symptom of grave importance, and requires the immediate discontinuance of the remedy.—*Deutsche med. Wochenschr.—Allg. Zeitschr. f. Psychiatrie*, Vol. 51, No. 6.

The Manner in which Diseases of the Brain Affect Musical Ability.—It is contended by DR. IRELAND that the sense for music is not, as is generally understood, developed from speech, but that, on the contrary, the comprehension of rhythmic sounds and tones of different pitch must precede the development of speech. Preservation of memory for melodies, as well as the ability to sing and to read music, is frequently observed in aphasia, while the opposite is very seldom the case. Ireland believes that the center for musical sensation and motion is not confined to the left hemisphere, but is located in both halves of the brain. For this reason he considers it probable, that a destruction of musical ability can only be brought about by a simultaneous lesion of both hemispheres. This supposition would explain why the musical ability, even in very profound disturbances of cerebral functions, is frequently astonishingly well preserved. The talent for music in idiots is sometimes remarkably devel-

oped in contrast to the deficiency in all other directions. In cases of feeble mindedness, musical accomplishments may frequently remain intact for a very long time.—*Journal of Mental Science*.

Examples of Falsehoods or Apparent Falsehoods in Cases of Hysteria.—

DR. VIBERT has reported two interesting examples of what he terms "pathological" falsehoods. The fabrications of hysterical patients are generally not falsehoods, as these persons are not conscious of the falseness of their statements, and as these latter are based upon real deceptions of memory. The first case, a servant girl, 28 years old, is found gagged on the floor, on her mistress' return to the house. She claimed that a burglar had entered the house and maltreated her in this way. The circumstances rather indicated that the assault in question was a feigned one. Nothing was stolen. The cause of this comedy was not ascertainable. (The girl had been hysterical for a number of years, and had for some days been subject to feelings of oppression and marked persecutory ideas. On the day of the feigned assault she was apparently in an abnormal mental state, probably somnambulism. As soon as she became lucid, after a few hours, she recognized at once the autosuggestive deception, to which she had been subject. The second case was that of a man, 30 years of age, who had presented symptoms of hysteria virilis. He was a person of very lively imagination; had heard of the railroad accident at St. Mandé, claimed to have been present and to have suffered severe injury. He sent in a claim for damages, which was rejected. In 1892 he appeared at a police station quite exhausted, vomiting blood, accusing a certain coachman of having wilfully driven over him. He was taken to the hospital, and on account of the presence of abdominal symptoms, a laparotomy was performed, but no internal injury was discovered. The investigation of the affair did not develop any satisfactory case against the coachman, but on the contrary made it probable that the whole story was invented by the accuser; *i. e.*, that it was a case of auto-suggestion. It appeared that the latter had no intention of hurting any one by the accusation, as he was so convinced of the reality of the injury as to permit the performance of a laparotomy.—*Annales d'Hygiene Publique—Allg. Zeitschr. f. Psychiatrie*, Vol. 51, Part vj.

FORMULÆ.

Leucorrhea:

Sulphate of iron..... ʒi
Carbonate of potassium... ʒi
Ergotin..... gr. xxv
Extract of licorice..... q. s.

S.—Divide into 50 pills, and give two or three pills three times a day, in the leucorrhea of anemic women. If constipation be present, replace the ergot by 30 grains of aloes.

Hemorrhoids.—ALLINGHAM uses:

Calomel ʒ ss
Morphine muriate..... gr. iiss
Bismuth subnitrate..... ʒ vi
Vaseline..... ʒ vi
Glycerin ʒ ii

S.—Apply.

Pleasant Laxatives.—(SMITH):

I. Glycerini ʒi
Ol. cinnamomi gttvi
Trit. bene et adde
Ol. ricini ʒi

S.—Teaspoonful at a dose.

II. Chronic Constipation.—(DELA-FIELD):

Strych. sulph. gr. $\frac{1}{40}$
Pulv. ipecac.
Ext. belladon.
Ext. colocynth. co. ... āā gr. $\frac{1}{4}$
Ft. pil No. I.

S.—Four pills daily at first, then three, and afterwards two.—*Brooklyn Medical Journal*.

Chronic Bronchitis.—THOMPSON gives:

Fl. ext. tarax.
 Fl. ext. rhei
 Syr. senegæ.
 Tinct. tolu āā 3 ss
 Sod. bicarb. 3 i

S.—This for chronic bronchitis with acid dyspepsia. Dose, teaspoonful three or four times a day.—*Medical Summary.*

Chapped Hands and Face.—SPRATLING recommends:

Tr. benz. co. mx
 Alcohol 3 ii
 Aqua rosæ mxxx
 Glycerin ad. 3 i

S.—Apply to chapped surfaces at night, after they have been washed with soap and warm water and thoroughly dried.—*Medical Record.*

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., San Francisco, Cal.

Mortality for July, 1895.—The deaths registered in 64 town districts of the State, during the month of July, in a population of 747,359, correspond to an annual rate of 15.60 a thousand, the total mortality having been 977. 98 deaths were due to zymotic diseases, giving an annual rate of 1.56 a thousand. Of these, 1 was due to diphtheria, 34 to cholera infantum, 29 to typhoid fever, 7 to diarrhea and dysentery, 2 to cerebro-spinal fever, 3 to whooping cough, 4 to croup, 4 to intermittent and remittent fevers, 1 to scarlet fever, 3 to measles, and 0 to small-pox. 253 deaths resulted from diseases of the respiratory organs, giving an annual rate of 4.20 a thousand. Of these, 198 were due to consumption, 33 to pneumonia, 20 to bronchitis, and 2 to pulmonary congestion; the rate being, for consumption and pneumonia, 3.12 and .52, respectively. 82 deaths resulted from diseases of the heart, 4 from alcoholism, 1 from erysipelas, 38 from cancer, and 448 from causes not given. The average annual death rate from all causes occurring in the ten largest cities and towns in the State, and representing a population of 593,000, was .16.22 The highest rate for the month occurring in cities having a population of 10,000 or more inhabitants, was reported from San Francisco, the lowest from San Diego.

METEOROLOGY.

Summary for July.—*Temperature.*—The normal temperature of the State for July is 73.1°; the average for July, 1895, was 72.8°, a departure from normal of - 0.3°. The highest monthly mean was 103.2° at Volcano Springs, in the desert regions; the lowest, 56.0°, at Eureka. The maximum temperature was 121°, at Volcano Springs, on the 16th. The minimum, 29°, at Boca, on the 4th. The greatest monthly range was 65°, at Turlock; the least, 17, at Hotel Del Coronado. The absolute monthly range for the State was 92°.

Rainfall.—The normal precipitation for the State for July is 0.05 inches; the average for July, 1895, was 0.09 inches, a departure from the normal of +0.04 of an inch. The greatest monthly precipitation was 1.55 inches, at Dunsmuir. The least, nothing, at numerous places throughout the State.

Wind.—The prevailing direction of wind was from the W.

Unusual Features.—The unusual feature of the month was the exceptionally mild weather in the interior of the State as compared with the usually high temperature which generally prevails during July and August.—JAMES A. BARWICK, Director California Weather Service.

California—Tabular Statement for July, 1895.

STATIONS.	TEMPERATURE.						RAINFALL.	Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean.....	Highest.....	Lowest.....	Mean High- est.....	Mean Low- est.....	Mean Daily Range			No. of Clear Days.....	No. of Fair Days.....	No. of Cloudy Days.....		
Auburn	75.6	102	56.0	70.0	55.0	15.0	T 0.04	82.0	11	11	9	N.W.	Southern Pacific Company.
Berkeley.....	59.7	85	52.0	70.0	62.0	8.0	0.00	77.0	27	2	2	S.W.	Obs. University of California.
Colfax.....	72.7	102	52.0	61.0	51.0	10.0	0.00	88.0	8	17	6	N.E.	Southern Pacific Company.
Coronado.....	66.0	75	58.0	96.0	62.0	34.0	0.23	35.0	28	3	0	W.	Hotel del Coronado.
Eureka.....	56.0	66	46.0	91.0	65.0	26.0	T	18.0	18	6	7	N.W.	Weather Bureau Dept. Agr.
Fresno.....	79.0	107	53.0	79.0	58.0	21.0	T	80.0	3	28	0	N.W.	"
Independence..	78.0	99	54.0	91.0	65.0	26.0	T	18.0	18	6	7	S.E.	"
Los Angeles....	68.0	85	54.0	79.0	58.0	21.0	T	80.0	3	28	0	W.	"
Monterey	58.8	76	52.0	78.0	57.0	21.0	0.00	71.0	12	16	3	W.	Southern Pacific Company.
Napa.....	67.0	93	51.0	72.0	54.0	18.0	0.03	81.0	20	6	5	S.W.	Station Napa Insane Asylum.
Oakland.....	60.0	88	49.0	72.0	54.0	18.0	0.03	38.0	27	2	2	W.	Chabot Observatory.
Paso Robles....	78.6	103	53.0	94.0	66.0	28.0	0.00	63.0	27	3	1	W.	Southern Pacific Company.
Red Bluff.....	80.0	107	56.0	86.0	57.0	29.0	0.16	77.0	20	11	0	S.E.	Weather Bureau Dept. Agr.
Sacramento. ...	71.0	98	51.0	94.0	58.0	36.0	0.04	77.0	27	2	2	S.W.	"
San Bernardino	76.0	98	49.0	71.0	61.0	10.0	0.00	86.0	11	17	4	W.	A. K. Johnson, M. D.
San Diego.....	66.0	74	57.0	63.0	54.0	9.0	0.00	81.0	17	10	4	S.W.	Weather Bureau Dept. Agr.
San Francisco..	58.0	83	50.0	71.0	59.0	12.0	0.01	81.0	17	4	10	E.W.	"
Santa Barbara..	65.0	79	54.0	75.0	53.0	22.0	0.00	41.0	27	4	0	W.	Hugh D. Vail.
Santa Cruz.....	64.0	91	45.0	75.0	53.0	22.0	0.00	41.0	27	4	0	S.W.	W. R. Springer.
Yuma.....	89.2	113	67.0	105.0	74.0	31.0	0.01	41.0	27	4	0	S.W.	Weather Bureau Dept. Agr.

Blank (----) indicates data missing.

Occidental Medical Times.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: SEPTNMBER, 1895.

THE COMMENCEMENTS—UNIVERSITY OF CALIFORNIA.

The commencement exercises of the University of California were held at the Baldwin Theater, on Saturday evening, July 13, 1895. After prayer by BISHOP NICHOLS, Mr. J. B. REINSTEIN delivered an address dealing largely with questions of medical jurisprudence. The valedictory address on behalf of the faculty was delivered by PROF. JOHN C. SPENCER, after which the degrees were conferred by the President of the University, MARTIN KELLOGG. The Hippocratic oath was, as usual, administered by PROF. R. BEVERLEY COLE, the President of the Faculty.

The following are the names of the graduates: Louis Dominic Bacigalupi, Joseph Crisanto Badilia, William Benjamin Franklin Barbat, William James Robert Boyes, Augustus Frank Brown, Frank Wilburn Dudley, Daniel Elisha Foote Easton, Horatio Bates Emerson, Ph. G., Rose Eppinger, Adelina Minnie Feder, Grace Feder, John Joseph Flood, Robert Frederick Gray, D. D. S., William Gilbert Hay, Clarence Louis Heller, George Leo Helms, Edward Kimball Hopkins, James Porterfield Hull, George Edward Hyde, Auguste Leon Jerome Lartigau, Frederick Andrew Lutz, Thomas Adam MacCulloch, Hammond Johnson MacCallum, John Ernst Nast, Frederick Augustus Rinne, Mary J. Sankey, Charles Joseph Schmelz, Ph. G., Bertram Stone, William Augustus Trafton, Albert John Villain, Ph. G.

The total number of students in attendance during the past session was 122, the number of matriculates being 16.

THE SITE FOR THE AFFILIATED COLLEGES OF THE UNIVERSITY OF CALIFORNIA.

It will be remembered that at the last session of the Legislature the sum of \$250,000 was appropriated for a building for the Affiliated Colleges of the University, now housed in various parts of San Francisco. It was understood at the time that this sum was to be

expended for a building only, the site to be donated, or purchased by money raised through subscription. As soon as it was definitely known that the appropriation would be available, a committee upon the important question of a suitable site was formed by representatives of the various colleges. Invitations were issued to public spirited citizens to offer lands that would be suitable, and many responded; some proposing to donate outright, others to sell at a reduced rate, or to donate a certain amount, and sell additional property if required. Amongst these, two were finally selected as the choice of the committee, one, offered by MR. ADOLPH SUTRO, close to the entrance of Golden Gate Park, the other at the Portrero, tendered by MR. CENTER.

Opinions were divided upon the two sites; the opposing forces being headed by DR. McNUTT, who favored the Portrero, and DR. COLE, who championed the location at the Park. The controversy waxed warm, and finally found its way into the newspapers. At DR. COLE'S suggestion, the committee, with others interested, were invited to inspect the sites; DR. McNUTT being absent on this occasion. Members of the committee who visited the two locations were practically unanimous in favoring the Sutro site, and a subsequent vote by the committee recommended it by an overwhelming majority. Since then the Regents of the University, to whom the matter was submitted for final judgment, have unanimously confirmed the opinion of the committee; and it may, therefore, be taken as settled that the home of the Affiliated Colleges will ultimately be built overlooking the beautiful Golden Gate Park.

The question under discussion naturally presented two aspects, and in support of either side much could be said. The Portrero site was comparatively small, but additional land could be purchased if deemed necessary. It was within ten minutes of the new City Hall, and close to the County Hospital. For the present it was, therefore, as far as the Medical Department was concerned essentially the best site. The tendency of medical colleges to-day is to combine, if possible, the hospital and school, thus affording every facility for complete instruction. The further, therefore, that school and hospital are placed apart the greater will be the loss of time to the student. The Portrero site would also have insured ample material for the college clinics; in fact, a far better supply than is now available at North Beach. These arguments, for the present, are unanswerable, and there can be no question that the selection of the Park site

has been made entirely with a view to the future. The land offered by MR. SUTRO consists of about 13 acres. It is located within two blocks south of and near the entrance to Golden Gate Park, on an eminence commanding a magnificent view. Immediately adjoining this tract MR. SUTRO intends to erect a building for the Sutro Library, which will there be permanently located. It is stated that the site is but fifteen minutes ride from the new City Hall, and that it is nearly the geographical center of the city and county of San Francisco. The situation is well sheltered, insuring freedom from winds and a smaller allowance of fog than ordinarily falls to the lot of San Francisco.

The beauty and salubrity of this site is undeniable, and the proximity of the Sutro Library will be a material advantage to the students; but for the colleges, particularly those of medicine and dentistry, it will certainly be many years before it will present the same advantages as a site in a denser center of population. It is true that San Francisco is growing rapidly, and that the natural growth of the city is in that direction, but this growth is mainly of a residence section whose inhabitants will not furnish clinical material to any appreciable extent.

THE TRANSACTIONS OF THE STATE SOCIETY.

The twenty-fifth annual volume of transactions of the Medical Society of the State of California has recently been issued by the Committee on Publication. The Chairman, while congratulating the Society on presenting the volume "a little earlier than ever before," again complains "that some of the officials of the Society continue this year, as last, to delay" its early issue. It is, no doubt, true in theory, that the transactions could appear within a few weeks of the annual meeting, but it is very doubtful whether this result will ever be realized where promptness depends upon the coöperation of so many persons.

The present volume is, by all odds, the best that has ever been issued by the Society. It is much larger than usual and contains a number of excellent papers. The twenty-fifth annual meeting was characterized by the excellence of its contributions, and their value in the present volume have been materially enhanced by the publication of a very full report of the discussions thereon. The press work shows very marked improvement, and but for the unlovely general

heading that has been used for the various Committees, is generally excellent in character and style.

In the list of Committees for 1896, we note several new names, and it is fair to assume that the meeting in Los Angeles will not fall short of the present standard in its literary character. The volume is remarkable and indeed unique in one particular, namely, the fact that every standing committee is represented by a report. It will be remembered that the volume for 1894 contained no reports from three committees, and in commenting upon this we suggested that some of the committees might be consolidated with advantage. At the last meeting of the Society these suggestions were adopted, and by the elimination of one committee and the re-arrangement of four, this lapsus will be less likely to occur in the future.

NOTES.

Nevada State Medical Society.

The second semi-annual meeting of the Nevada State Medical Society was held at Virginia City, on August 12th. Papers were read on Obstetrics and Gynecology, by Dr. K. Van Harlingen; on Medical Jurisprudence, by Dr. H. Bergstein; and on the Progress of Surgery, by Dr. P. T. Phillips. After the close of the meeting the members were handsomely entertained by the local physicians.

Buffalo Medical Journal Jubilee Number.

The August issue of the *Buffalo Medical Journal* completes the fiftieth year of its publication, and the *Journal's* semi-centennial has been celebrated by the issue of a jubilee number, and the permanent increase of its reading matter from 64 to 80 pages. The special issue is handsomely printed and profusely illustrated. Naturally, the most interesting feature of it is the retrospect of Buffalo's medical history during the past fifty years. Herein is graphically detailed the progress of the city and its medical institutions during the years in which Buffalo, from a city of 30,000 inhabitants has steadily increased to one of 300,000. The *Journal* was founded in 1845, by Austin Flint, and has since numbered amongst its editors many who have made their mark in the medical history of the great State of New York.

An Alleged Horned Man.

Some weeks ago the daily papers contained accounts of a remarkable freak in the shape of a "horned man." These horns, fair illustrations of which appeared in some of the papers, were dwelt upon at considerable length as an extraordinary phenomenon.

Horns, in the sense of true dermal outgrowths, are usually central and a symmetrical position in the situation commonly used in depicting his satanic majesty would be very uncommon. In the present case, Dr. R. O. Baldwin, the coroner of Alameda county, informs us the horns were simply sebaceous tumors, the larger being about the size of a hen's egg and the smaller one the size of a pigeon's egg. They were symmetrically placed on either side over the prominences of the frontal bone, and at a cursory glance, made a very fair representation of horns as depicted by the artist.

California Northern District Medical Society.

The fifth annual meeting of the California Northern District Medical Society will be held in Sacramento, Tuesday, October 8th. In our next issue will be published the preliminary programme of the meeting. From the list of contributions so far announced it is certain that there will be ample material for the consideration of the Society, and as many of the members have signified their intention of being present, it is evident that Sacramento will again have a very successful meeting. The central location of this city on the various transportation lines traversing the territory of the Society, makes it one of the most convenient in which meetings can be held. In fact it is easier for members living at a considerable distance from Sacramento to attend a meeting here than at places forty miles nearer home, and they can do so at a smaller sacrifice of time. For any information regarding the meeting, inquiries can be addressed to the Secretary, E. E. Stone, of Marysville, or the Chairman of the Committee of Arrangements, J. H. Parkinson, Sacramento.

Qualifications of Candidates for Admission to Medical Societies.

At a recent meeting of the San Francisco County Medical Society Dr. C. G. Kenyon made some very pertinent remarks on the qualifications of applicants for membership, and incidentally on the duties of the Committee on Admissions. Dr. Kenyon very properly said that more is needed than a simple examination of credentials. Something regarding the social, moral, and professional standing of a candidate is also needed. A man's credentials may be perfectly straight, and, as the speaker said, he may be in every sense a quack, and in many respects unworthy of membership in a reputable medical society. There can be no possible object in stuffing the rolls of medical societies with the names of men who care nothing for medical organizations, and who, if not openly disreputable, are notoriously unprofessional in many respects. The rule under which an application for membership goes over until the following meeting is a good one, but every society would do well to supplement this by a

more careful canvass of the merits of the applicant through its Committee on Admissions.

Poisonous Spider Bites in California.

Occasionally cases appear in the newspapers which are described as poisoning from spider bites. The latest of these comes from Alameda, where a woman was bitten by a spider, and subsequently suffered from aggravated nervous symptoms. These were ascribed by the friends and relatives to the effects of the bite, and some newspaper physicians appear to have unqualifiedly coincided with this view. It is unfortunate that the stern logic of facts should destroy a good "story," but there appears to have been no foundation whatever for this case of poisoning except the impressionable nature of a highly nervous woman. We understand there was nothing about the case that was in the least serious, and at no time were any toxic symptoms exhibited. In this connection it is worth noting that the popular remedy for poisoned wounds of any kind is a liberal exhibition of stimulants. On several occasions we have observed the symptoms of intoxication in a nervous subject, unaccustomed to the use of stimulants, to have been mistaken for the delirium of poisoning. While there is no intimation that this occurred in the present case, yet it happens so frequently that it deserves the attention of the medical attendant.

An Impostor.

From time to time the advertising quack whose enterprise is sometimes commended by the business end of the press, publishes statements that, to say the least of it, are overdrawn. It has often seemed to us that it might be good policy to expose the more flagrant of these frauds; and men who have given considerable attention to this question have advocated the use of the same medium for this exposure. Wherever possible we have corrected the statements of the fraternity that have been particularly mendacious, and in the present instance have much pleasure in exposing some of the pretensions of one A. J. Howe, who has occupied columns in the Sacramento papers descriptive of his qualifications and abilities. His advertisement states, among other things, that he is "late Resident Surgeon, Marine Hospital, San Francisco." Upon inquiry we have ascertained the following, (1) That the name of A. J. Howe does not appear on the list of internes that have served at the Marine Hospital in San Francisco. (2) That there is not and never was such a position as "Resident Surgeon" of a Marine Hospital. (3) That there are no homeopaths in the Marine Hospital service, as primarily all medical officers must be regularly graduated from real medical

colleges. and must pass examinations of a fairly high standard in order to receive an appointment therein.

Accident to Dr. Maurice Pritchard.

We regret to announce that Dr. Maurice Pritchard, of Sierra Valley, was recently the victim of a serious assault which narrowly escaped being fatal. On August 22d Dr. Pritchard was conversing with Postmaster Olsen, at the local postoffice, when a rough character named Chas. Loughlin, with two companion, came into the store in which the office is located, and began using very abusive language about the town and its inhabitants. The Doctor quietly inquired why they remained in the place if its character was so reprehensible. Loughlin walked over to the Doctor and began abusing him in the foulest possible manner. To this Dr. Pritchard made no reply, but armed himself with a hay-fork, but before he had raised it Loughlin fired at him, missing his mark. He again fired, and this time the bullet entered the right breast, one inch to the right of the nipple. After striking him with the fork the Doctor then clinched to prevent his using the revolver, and after a brief struggle the combatants were separated. Dr. Pritchard says he did not know he had been wounded until the hemorrhage internally began to cause dyspnea. About twenty-five ounces of blood were lost from the wound, externally. The Doctor got out of bed on the sixth day, but on the tenth day, becoming apprehensive of abscess formation, he went to San Francisco, and is at present an inmate of the Lane Hospital. No trace of the bullet has been found, but from the absence of hemoptysis and of any grave symptoms, it is evident that it could not have entered the lung. The hemorrhage, in all probability, came from the intercostal artery and the bullet may have been deflected by the rib to find a lodgment in some of the superficial tissues. As a result of the shooting a Vigilance Committee was formed and the parties concerned in the assault were ordered to leave town.

Dr. Case, of San Jose, Tried for Manslaughter, but Acquitted.

Some weeks ago, Dr. Henry Case, of San Jose, a graduate of the University of Michigan, was arrested and charged with murder in having caused the death of a patient, a Mr. Frost, of that city, by mercurial poisoning. The charge was afterwards reduced to manslaughter, for which the doctor was tried, but the evidence in the case for the people being insufficient to insure conviction, the defendant was discharged. After the death of Mr. Frost, it was rumored that he had not died from natural causes. The body was exhumed, and the viscera removed for examination. Auchie Cuninghame, the chemist of San Francisco, to whom the specimens were submitted,

found over 6 grains of bichloride of mercury in the tissues. It appears from the evidence that Dr. Case was frequently in the habit of dispensing medicines from his pocket case and had done so when attending the deceased. Solids were measured approximately, the blade of a pocket knife being used for the purpose. An examination of the case in question showed that none of the bottles were marked, only the leather straps holding the vials in place were labelled. Many of the vials were misplaced and some contained more than one drug. The analytical expert testified to finding bichloride of mercury in several of the bottles and morphine in the Dover's powder. Some of the tablets marked morphine did not contain a trace of the drug. The prosecution broke down in its expert testimony, on the amount of mercury found in the tissues and its relation to the death of the patient, and the doctor was discharged. The evidence, however, showed a most culpable degree of carelessness. To carry and use such a pocket case in the dispensing of medicine, would leave any one open to a criminal charge in the event of misadventure. Dr. Case is not a member of the Santa Clara County Medical Society, and is not in good standing with the profession of San Jose.

The Execution of Fremont Smith.

The deplorable accident at the hanging of Fremont Smith, who was executed at San Quentin, on August 9th, for the murder of two unknown fishermen in Colusa county, while of such a character as to horrify the public, seems to have been unavoidable. The culprit was a large man, weighing about 220 pounds. The rope used was seven-eighths of an inch in diameter, or one-eighth of an inch larger than the usual size. The drop was nearly five feet, rather shorter than the average. When the drop fell, and immediately upon the rope becoming taut, the spectators beneath the gallows could plainly see blood flowing from under the black cap in sufficient quantities to indicate that something little short of decapitation had happened. The victim, as was proven by *post-mortem*, died instantly, and from a humanitarian standpoint the execution was, therefore, as painless as if no mishap had occurred. At the autopsy, which was held immediately after the execution, the following facts, for which we are indebted to the Prison Surgeon, were developed. The muscles on one side of the neck, the spinal cord, and the carotid arteries of both sides were completely severed. The head was therefore attached to the body by some of the soft tissues only. The opinion of several of the physicians present at the autopsy was, that to avoid all possible danger of death from strangulation, it would have been unsafe

to have made the drop any shorter. From a sentimental standpoint, accidents such as the foregoing, even though death has been instantaneous, are of such a revolting character that they go a long way in supporting those who desire the abolition of the death penalty. On the other hand, as between such an execution and decapitation by the guillotine, there is little choice, nor can the advocates of execution by electricity on those occasions, where roasting of the victim at the site of the electrodes has occurred, find much to encourage them in a change from the older method of hanging.

Dr. W. H. Mays and the Governor's Case.

Governor Budd, whose health for several months past has been rather poor, has recently been suffering from a severe indisposition, at his home in Stockton. Of course, much interest has been manifested by the people of the State in the distinguished invalid, and the papers have published lengthy accounts of his illness, symptoms, and progress. The Governor's physician is Dr. Sargent, who holds a license from the Homeopathic Board of Medical Examiners. The pathology of the case, according to published reports in the newspapers, seems to have been a little mixed. There was at first a fear of "spinal meningitis," or symptoms of it, which afterward became "brain trouble," and subsequently, when the "meningitis" had been gotten under control, attention was directed to the "rheumatism," which was also an important factor in the case. We mention the foregoing, because in the *Stockton Mail* of August 19th, in a bulletin relating to the Governor's condition, the following occurs: "Dr. Sargent, feeling the importance of his patient, wrote to Dr. W. H. Mays, of San Francisco, who was formerly Superintendent of the State Insane Asylum, describing the treatment he was giving. Dr. Mays replied in a letter, as follows: 'Your management of Governor Budd's case has been highly judicious throughout, and calls forth my sincerest congratulations. It has made your name extensively known as one of the most skilful and leading physicians of the State.' " The publication of this statement naturally created considerable comment amongst the profession at Stockton, as Dr. Mays, in addition to his qualifications as a graduate of the University of California, is also a professor in the Post-Graduate Department of the University, and a member of the State and of the San Francisco County Medical Societies. The statement, as published, made it appear that Dr. Mays had been taken into counsel in the case. That this is very far from being so, the following explanation, for which we are indebted to the Doctor himself, will plainly show: "The statement you quote from the *Stockton Mail* is

erroneous. Dr. Sargent has never inquired or spoken to me about Governor Budd's sickness, hence I know nothing about his diagnosis or treatment of the case." We are very glad to give publicity to this correction, as the publication, as it stood, placed a reputable member of the profession in a decidedly unpleasant position.

An Unjust Reflection upon Pomona Physicians.

In the press dispatches of September 3, the following appeared:

LOS ANGELES, Sept. 3.—H. S. Hill, of Portsmouth, Ohio, who had his legs cut off by a freight train at Pomona last Sunday, died this morning at the county hospital. At the time of the accident two Pomona physicians were summoned to attend the man. If the stories told of them be true, they acted in a most heartless manner. According to the stories, when they arrived at the scene both physicians refused to do anything for the relief of the wounded man, although he was bleeding profusely from several arteries, until they were guaranteed payment for their services. Meantime the injured man lay in agony, no attempt being made even to stop the flow of blood. Spontaneous guarantees were made by the bystanders, but still the doctors waited, evidently desiring to see the money before rendering any service. At last the man was taken to the city jail, but there being no bed there, he was carted to a lodging-house, where the doctors at last dressed his injuries on the personal guarantee of the City Marshal that their bill would be liquidated. For over an hour the man was without surgical assistance, a circumstance which is regarded as the real cause of his death.

This item is typical of reports that from time to time appear in the daily papers, and in which physicians are typified as mercenary and heartless. Such publications often result in the unwarranted condemnation of men who are wholly innocent of the offenses charged. The report is written at a moment of excitement, often without possession of all the facts of the case, and is in harmony with the sentiments of the crowd. That the case under consideration is no exception to this rule, the following letter plainly indicates. This letter was written to the *Los Angeles Times* in reply to the criticisms of that paper, which form the basis of the press dispatch to which we have already alluded:

To the editor of the *Los Angeles Times*: Regarding the tramp, H. S. Hill, and the charges of neglect published in the *Times* this morning, we believe the following statement due to the Pomona physicians:

In the case of tramps or indigents who have been injured or taken sick at Pomona, the county authorities in the past have absolutely refused to allow \$1 for any purpose whatever. Not only have they refused to pay the physicians here for any services rendered, but they have also refused to pay anything for lodging, nursing, clothing, food, medicines, or surgical supplies, or even for fare in to the

county hospital. In a similar case to Hill's, about a year ago, in which Dr. Smith telephoned in for authority to properly care for a mangled tramp, the request was refused, and instructions given to "roll him up in a blanket and ship him in on the first train. That's what we have a county hospital for." In other cases, Pomona doctors have freely furnished medical services, supplies, and medicines without prospect of compensation, and have repeatedly shared with the City Marshal and other benevolent citizens the expense of tickets to the hospital. Pomona pays her share of county taxes, but is allowed no deputy county physician, nor money to care for those too ill to be safely moved. Where does the charge of inhumanity lie? As for the above case, the injured man was taken to a hotel, and the four undersigned physicians gave him attention. They recognized that both legs needed amputation above the knees, but as he was suffering from shock, and would have to be removed to the county hospital in the morning, they deemed it best to simply secure the vessels against hemorrhage, wash, wrap, and bandage the limbs, stimulate and support the patient, and postpone the amputations until he reached the hospital. It was not a case of negligence nor ignorance, Dr. Kane or your reporter to the contrary notwithstanding. Yours for humanity and justice,

POMONA, Cal., Sept. 5, 1895.

R. A. CAMPBELL,
T. H. SMITH,
F. GARCELON,
C. W. BROWN.

It is reported that Dr. Smith inquired who would pay for the services sought, but this was certainly a very natural request, as the proper authorities have no more claim on a physician's charity than on that of the grocer or the baker. It is also true that the doctor afterward did most of the surgical work in the case, without any consideration. In the past, cases of a similar nature have arisen, and the county authorities have refused to allow any compensation for services rendered in these emergencies. There is certainly no class of men whose services are so often and so freely given as those of physicians. In Pomona, however, the physician is expected to give, not only his time and skill gratuitously, but also to pay such bills for board and nursing as may be needed for the care of the unfortunate, as claims for money expended have been repeatedly ignored by the authorities. In this case, the chances of life after a double amputation were certainly small, but these chances were practically extinguished when transfer and transportation of thirty-five miles by train are considered, and when it is remembered that the train in question did not leave until the following morning. The *Pomona Progress* states the case so fairly, and its comments are so much to the point, that we give the article in full:

There has been no little talk on the streets and about town regarding the treatment received by the man who was run over by a freight

train on Sunday night, and the utter lack of provision for handling such cases at this place. The very fact that the man was hauled about town and kept in a wagon an hour before a comfortable place to put him was found, shows that it is high time that something was done in the name of humanity to provide for such emergencies. The man was first taken to the depot, and permission not being given to put him there, he was taken to the city jail and kept in waiting there till the City Marshal arrived, who very properly refused to allow him to be put into the jail, as it was not a fit place for such cases. He ordered that the man be taken to the Central Hotel, where he could be decently cared for. The case was one that demanded prompt surgical treatment. The man's legs should have been amputated at once, but as the county will allow no pay for such services or any other expenses connected with such cases, and directs that such persons must be sent the county hospital to be treated, the physicians here were not disposed to undertake the task. The people of Pomona have a right to demand that there shall be some provision at this place for caring for persons who are too badly injured to be taken to the county hospital. While no man, or crowd of men should be willing to see a man mangled and not properly cared for, when a little labor and a few dollars might save his life, yet it is an outrage that the county will do nothing in such cases. To talk about keeping a man, with both legs cut off by cars, without any care several hours, and perhaps half a day, till a train arrives, and then taking him thirty miles to the county hospital for treatment, is to condemn him to certain death. Such persons should be cared for here until they can safely be moved to the county hospital, and the county should stand the expense, or Pomona should know the reason why it does not. It is strange if a city of 6,000 inhabitants is not entitled to that much consideration at the hands of the county.

What Pomona needs is a receiving hospital, at which all emergency cases can be properly treated. A good room, with a couple of beds and some hospital furniture, could be fitted up at very small expense, and a physician could certainly be found who, for a moderate salary, would apply first dressings, and temporarily care for these cases.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, July 23, 1895.

The President, C. B. NICHOLS, M.D., in the Chair.

New Members.—C. O. CARTWRIGHT, M.D., and F. D. TYRRELL, M.D., were duly elected members of the Society.

Antitoxine in Diphtheria.—DR. G. C. SIMMONS reported a case of diphtheria in which he had used antitoxine with success. When he first saw the child it was breathing rapidly, and unmistakably growing worse. He gave two Pravaz syringefulls (one drachm) altogether. The next morning the child was much better. At noon the child was again worse, and he gave it 20 drops. After that the child got along very nicely, making a good recovery.

DR. F. B. SUTLIFF: I have recently seen a case of diphtheria in a child two

months old. In this case the membrane had extended into the larynx, and there were distinctly croupy symptoms. Death would have been expected under ordinary treatment. Antitoxine was used, and while recovery was not rapid the child's life was undoubtedly saved by the treatment.

DR. W. A. BRIGGS: I saw both these cases, and they were undoubted diphtheritic laryngitis. In five other cases there was evidence that the disease was diphtheria, but this was not positive, as antitoxine was used as soon as the case was seen, without a positive diagnosis being made. All these cases recovered. These seven cases have demonstrated to me that we should use antitoxine in every case of diphtheria. The reports in the journals, on the whole, favor the use of antitoxine. Statistics show that every one should use it when treating a case. It will be three or four years before we can positively determine its value. In Paris and Berlin the mortality has been reduced materially. Statistics from eastern centers show that the results are much better than under the old lines of treatment.

DR. C. E. FOWLER read a paper on "Gun-shot Wounds, with a Report of Seven Cases." [Published at page 536.]

DR. G. L. SIMMONS in opening the discussion said: The reader of the evening's paper has certainly given us a very interesting selection of cases. I was struck with one point and that is in regard to the possible chance of recovery by abdominal section, where the intestines are wounded. I believe the present line of treatment requires us, in all cases involving the contents of the abdominal cavity, to make an exploratory incision, and possibly, if this is not done, the experiment of Senn, of Chicago, by the use of hydrogen gas, might determine the point of injury of the lumen of the bowel. I recall in this connection a good many cases in my lifetime, of gun-shot wounds where the *post-mortem* examination showed that if an abdominal section had been performed there would have been a fair chance of recovery. This brings me to the recollection of a case about fifteen years ago, of a girl 13 years of age; who was passing a shooting gallery at Richmond Grove. She was passing in an oblique direction from a temporary shooting gallery, when she suddenly sank to the ground. Her mother, who was with her, supposed she had fainted. A doctor, who, by the way, was not a member of the Society, was called. In removing the clothing a very small puncture was observed near what we now know as McBurney's point. He immediately took out his pocket case and probed the length of his probe in toward the left. He then said that it was probably a bullet. The child was taken home and I was sent for, and I asked that the one who had made this examination be sent for. Together we examined the wound, when he again took out his pocket case, probing in to the left the whole length of the probe. He said he did not think it had gone in very far, or did not think so at the time, but the persistence of shock was such that though we could not find direct traces of the bullet, it was evident that it had entered the abdominal cavity. Other surgeons were called, but no one suggested an exploratory incision. The child died about seven days afterwards. The bullet, instead of going in in the direction the probe had taken, went directly into the cavity and had made a single puncture in the intestine. There was nothing in that case but what could have been treated with fair success under modern methods. I merely mention this case to show the advances which have been made in this line, and which perhaps, the reader of the evening might have mentioned had it occurred to him to do so. It also illustrates how important it is in probing not to probe into the cellular tissue; that of the abdominal wall being exceedingly loose, the probe, with a fair amount of force, will easily divide it. When we are called to these cases of sudden injuries, or gun-shot wounds, the crowd, ordinarily, expect us to do a great deal of probing or to use the finger. I believe a surgeon has no right to probe or use his finger until his instruments are thoroughly sterilized. There is another point, and that is in regard to the treatment of hemorrhage, as a result of these wounds. When there seemed to be shock from hemorrhage, I have seen remarkable evidence of good from the use of saline injections. They are very valuable in hemorrhage of any character, especially, if shock is about to occur. Regarding pistol wounds, I have noticed that division of the missile is not infrequent. In my lifetime I have seen a number of these cases. One was that of a man who ran a trading boat on the river. He was quite unused to weapons and brought a pistol down to a gunsmith to be repaired. He returned on his next trip for

the pistol. The gunsmith laid the weapon on the counter, whereupon the man took the pistol, and holding the muzzle towards his face, began fingering the trigger. The weapon suddenly exploded. The wound of entrance was directly over the ridge of the left eye. I found that it had struck the skull, apparently following the bone down near the eye where I cut it out. In looking at the bullet I thought it was all there. I saw it was misshapen, but I did not weigh it. Symptoms of brain trouble ensued, and several surgeons were called in, but the patient died ten days after the injury. At the *post-mortem* examination we found a piece of the bullet, not over three grains in weight, had gone into the orbit behind the left eye, through the sphenoid, directly into the brain. The course of this small fragment was easily traced, and all symptoms resulting from inflammation, so usual in such cases, were apparent at the autopsy. In connection with shock and the prognosis after the shock, I have an illustrative case. Quite a number of years ago I was called to see a boy 13 years of age who was shot in the stomach, the point of entrance was below the ensiform cartilage. The crowd around the house was so great that I could hardly wedge my way through. I met one of our surgeons—a well known man of great experience—coming down the steps. He said Doctor, there is no use going in, the boy is almost dead. Just then one of the family said come up, Doctor. I went up, and after looking at the boy a few minutes I thought I noticed some evidence of life, although I could not feel any pulse. I injected some ammonia and some whisky, and the result was the boy rallied and is well to-day. This appearance of shock simulates hemorrhage so closely that it is well to be guarded in all these cases.

DR. L. A. HARCOURT: There are several important points to observe in the treatment of gunshot injuries. Hemorrhage should be controlled, and the wound rendered aseptic; after that interfere as little as possible. Where these rules are carried out good results will follow. Hemorrhage is a very important factor. With the bullets of 25 or 30 years ago death was usually caused by acute primary hemorrhage. As little probing as possible should be done. If the surgeon is deficient in cleanliness in the treatment of these wounds, patients are apt to die of septicemia. In the checking of hemorrhage from penetrating wounds or cavities the antiseptic tampon was useful.

DR. H. H. LOOK said: I have not had much experience with gunshot wounds, but have always followed the plan of probing as little as possible, and doing it when I had plenty of time. There is a good deal of probing done that is very unsatisfactory. As for tetanus, I think it is pretty well decided that tetanus is due to a specific germ. This germ has been discovered in garden soil. Of late years tetanus does not seem to occur so much amongst farmers and gardeners as it did some years ago. I know in my father's time lockjaw was a very common occurrence amongst farmers, which I think was due to their working so much in the soil and around stables. In the case reported by the author, there was ample opportunity for the germs to enter the finger. The patient, I presume, lay in the street, where the germ will find a home, and was carried from thence into the tissues. I have no doubt if a bacteriological examination had been carried out in this case, germs would have been found in the tissues after death.

DR. W. J. HANNA said he had recently seen a very interesting case of gunshot injury that was under the care of Dr. Odgen. Four years ago a young man, in carrying a pistol in his hip pocket, was wounded in the thigh by the accidental discharge of the weapon. The bullet had not been found, and it had not troubled him until a few days ago, when it became apparent below the knee. It was not superficial, being beneath the skin, and was removed without difficulty.

DR. G. C. SIMMONS said he had been called to see a boy who was shot in the knee, on July 4th. He examined the wound, removing some wads. The wound was dressed, and apparently was doing nicely. Four days afterwards evidence of local irritation rendered it necessary to make an incision, when another piece of wad was removed. The day following a third piece came away, after which the wound healed nicely.

DR. FOWLER, in replying, said: In the case of lockjaw which he reported, he had used every precaution. The wound in the hand, which was quite superficial, had been dressed twice a day. The injury in the side had been carefully examined, but nothing was found. It was also dressed with great care, and he did not see any reason, from the local symptoms, for the occurrence of lockjaw.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, July 9, 1895.

The President, C. C. WADSWORTH, M.D., in the Chair.

New Members.—CHAS. S. MAGUIRE, M.D., C. H. GRIMM, M.D., M. GARDNER, M.D., H. M. BERNDT, M.D., A. T. EAGAR, M.D., and EDWARD GRAY, M.D., were duly elected members of the Society.

Resolutions on the Death of Dr. J. T. Le Tourneux.—DR. G. W. DAVIS, Chairman of the Committee on Resolutions, on the death of Dr. Le Tourneux, presented the following report:

WHEREAS, We have received with sadness the intelligence of the death of our professional brother, Dr. Le Tourneux, who, in the zenith of his career, has, by an all-wise Creator, been removed from the field of earthly labor; therefore:

Resolved, That in the death of Dr. Le Tourneux, a friend, a co-laborer, and a member of this Society, his loss is sincerely felt by us. That the profession of our city has been deprived of one whose interest in its cause was characterized by devotion to suffering humanity, to justice, duty, and professional integrity.

Resolved, That to the bereaved wife and relatives we tender our earnest sympathy and condolence.

Resolved, That these resolutions be published in the medical journals of this State, and that a copy be transcribed and sent to the wife of the deceased.

The resolutions were adopted by the Society, and ordered spread on the minutes.

Dr. R. Beverley Cole.—In accordance with the programme of the proceedings of the evening the President, DR. C. C. WADSWORTH, said: At this meeting it is our pleasure to meet Dr. R. Beverley Cole, President of the American Medical Association, and I appoint Dr. C. G. Kenyon and Dr. W. F. Cheney to escort Dr. Cole to the platform. In presenting the distinguished guest the President said: Dr. Cole needs but little introduction to this Society, or to the profession at large. He has been with us for years, always an earnest worker and faithful to the medical profession. It is very fitting that we, in this his hour of triumph, are enabled to welcome him in our midst.

DR. C. G. KENYON said: When the electric wire flashed to this coast the information that Dr. Cole had been chosen President of the American Medical Association, the highest honor he could obtain as a medical man, I dare say that every person in this city, as well as the medical fraternity of the State, was proud that California should have been so honored. We know him as a zealous member of the Association, one who has attended more of its meetings, and has been a more active worker in its behalf, than any other man on this coast. I am sure I have but voiced the sentiments of all when I say we are heartily glad to tender him, at this seemingly late day, this reception.

DR. JAMES SIMPSON said: I am pleased to hear of Dr. Cole's success, not only on his own behalf, but for this Society and for the members of the profession on this coast. I have known him for a long time as a worker in the ranks; in fact, I believe that he, with two or three others, has done more to elevate the medical profession than any one else here. I know that he has long wished for this honor, and now that he has attained it, let us all unite in hearty congratulations.

DR. R. BEVERLEY COLE: It is said, and truthfully, that "talk is cheap." One may talk a great deal and say but little, but when words fall from the lips of men mature in years, with knowledge of the world, of men and of me, it is so flattering I hardly know in what terms to express myself. It is true that I am an old member of the medical profession and have always been zealous in the great cause. I recall the time when I first came here, many years ago, and the memory of those times is not pleasant. Then everything was in a chaotic state; no organization of society nor of the profession. The profession was made up of a heterogeneous mass of humanity; I cannot say of medical men. Among them, of course, were many able men, and it seemed to me that some organization should be effected to classify the regular and the irregular. I was amongst the first to form such an organization; from it grew the State Society, and through it I was delegated to the American Medical Association. I do not

know exactly how many times I have crossed the Continent to reach the place of meeting or traveled by way of Panama, but it is more than twenty times. Dr. Simpson has said something regarding my ambition. I have had such an ambition and I am proud of my success; I do not wish to deny it, and if I have reflected any credit on the community, on this Society and on the State, I feel that it is an additional gratification. I am no longer young, but I hope to be spared to preside over the deliberations of the Association of which I have been chosen President, and if so, I trust that I shall reflect credit upon you. In conclusion, I wish to return to you my most heartfelt thanks for this gracious reception. I consider it not only a compliment to me, individually, but also to the American Medical Association.

The Society then adjourned to a banquet, which was given in honor of Dr. Cole on his election to the Presidency of the American Medical Association.

SAN FRANCISCO MEDICO-CHIRURGICAL SOCIETY.

Regular Meeting, July 1, 1895.

ALBERT ABRAMS, M.D. in the Chair.

Syphilis.—DR. C. N. ELLINWOOD opened the discussion on the subject of syphilis. He said: The essential factor in the production of syphilis is not known. Neither its clinical constitution nor its physical form have been determined. It has not been separated from inoculable secretions and lesions, which we know will communicate the disease. The many analogies of the behavior of germs in the human organism, in the production of the exanthemata, their periods of incubation, together with the marked therapeutic effect of germicidal drugs in syphilis, argue forcibly for a germ theory in the etiology of syphilis. Lustgarten, in 1885, described a bacillus of definite form and situation in the tissues, which inspired the hope in many that a discovery had been made which would give us a more intimate knowledge of the etiology of the disease. But the many diligent workers in this field of research have as yet failed to establish any constant bacillus in syphilitic lesions or to identify any morphological element as the essential factor in inoculating the disease. The classification of the symptoms of syphilis made by Ricord and impressed by his strong positive character upon the medical world, he based upon clinical observations, which every student now knows to be erroneous, and which has perhaps retarded the development of a more accurate knowledge of the subject, a classification founded upon deductions, which Ricord himself declared erroneous many years before he died, and which he tried to correct. but still his division of syphilitic symptoms into primary, secondary, and tertiary, remains almost universally used. Ricord taught that only the primary stage was infectious by contact; the secondary stage only infectious by heredity, and the tertiary lesions not infectious at all. It seems incomprehensible to us now, how such devoted observers, with such large opportunities, could have made such errors. Syphilographers have labored and books have been written, to substantiate another, a more scientific nosological classification of the symptoms of syphilis, but none have succeeded, and Ricord's yet remains, while every observer, and teacher, makes his own interpretation of just what should be understood by them. On the question of curability of syphilis, and the action of drugs upon the disease, many different and widely conflicting views are entertained, but a general admission of this observation runs through all the authorities, *i. e.*, mercury and iodine cause a speedy amelioration of the symptoms and finally a disappearance of them, and if the disease is curable, these two are the only known drugs which accomplish it. My own conviction is that syphilis is curable in some persons, while in others it is not. To illustrate what I mean by a case, and also to advance my argument that, in some individuals, syphilis is cured, I beg to briefly report a single case, not by any means the only one in my case book. Mrs. P—, a young married woman, was brought to my office by her husband, in 1884, with a typical pustular syphilide of many months' duration. She came from the mountains where she had been treated for rheumatism, on account of the pains, but the diagnosis of syphilis had never been made, and no specific treatment had ever been adopted. Carefully developing the history of the case, and by examination of the whole body, it was evident that the initial lesion was upon the left nipple, followed

by the typical primary adenopathy, roseola, nodes on tibia and ulna, and numerous plaques, until finally, when she came under my observation, she presented the most generally distributed and aggravated rupia which I have ever seen. The pustules were so large and numerous, and the discharges from them so great, that she was enfeebled and emaciated. I gave her quinine, with cod liver oil and mercury, with local applications of iodine, aqueous solutions, saturating compresses, nearly covering the body, and later mercurial inunctions externally, with syrup iodide of iron and glycerine internally. A marked and rapid amelioration of the symptoms followed this medication. She continued under observation and this line of treatment for three years and a half. February 14, 1885, she aborted early in pregnancy. February 13, 1886, pregnant five months, and later delivered, near full time, of a non-living fetus, yet a few scattering pustules on her skin, and many pockmarks over the whole body. Seven years later she came to see me from the southern part of the State, and brought with her two children, of about 3 and 4 years of age, healthy, robust, beautiful children, perfectly free from syphilitic taint, and the mother has had, for six years, absolute immunity from any disease. Such cases argue for the curability of syphilis, and for mercury and iodine as the therapeutic means for its accomplishment.

DR. J. O. HIRSCHFELDER said: It is probable that there is a germ at work in syphilis because of the great similarity of the lesion to tuberculosis and leprosy. These three diseases with carcinoma and sarcoma belong to a great family. The resemblance of the syphilitic lesion to sarcoma is remarkable. A peculiarity of the syphilitic lesion is that it consists of an infiltration of round cells which is most noticeable around the blood vessels. In sarcoma, the round cells form the blood vessels. The curability of syphilis by mercury also argues for a germ theory.

DR. L. C. LANE said: In the winter of 1874 Acton gave a dinner at which the famous syphilographer, Ricord, was present. Ricord, then an old man, said in his speech: "This is probably the last time I shall give public utterance. Here at the end of my career I wish to say that I firmly believe that syphilis can be cured—not in a short time, but in two years of constant treatment." We are greatly indebted to Hunter, who first used mercury in the treatment of syphilis. Iodide of potash was not used till the first quarter of the present century. The primary syphilitic sore or chancre is often very much like an epithelioma, and it has puzzled many a surgeon to make the decision. Several years ago a young woman came to me with a typical epithelioma of the lip. In three or four months of anti-syphilitic treatment the disease entirely disappeared. Sometimes the chancre occurs on the penis in such a form that it is almost impossible to distinguish it from epithelioma. Laverigne and Terrier have shown that chancre, in general, has low margins, while epithelioma has high edges with irregular bottom, while the chancre is more even on its floor. Syphilis is a wonderful disease. It may manifest itself in any part of the body—it may make the human body a pathological museum. It has a particular tendency to locate in the upper bowel, forming transverse ulcers. Porter, of New York, wrote on syphilis of the lungs. In this form of the disease there is great expectoration, without much breaking down or softening of lung structure. Zillus, of Tübingen, in 1887 studied syphilis as manifested in the placenta. Where the child inherits syphilis from the sperm, the mother remaining sound, the lesions are on the fetal side of the placenta; but where the mother miscarries, the lesion will be found on the maternal side. If, however, the father infects the mother with chancre, the whole placenta is affected. According to Wegner, syphilis in the child locates in the epiphyseal cartilages in the long bones. Virchow used to pass around the class specimens of the lesions. Not rarely the child's bones break at birth. The kidney is also a favorite site for the syphilitic lesion. Heurteloup and Wickham say that a good many cases of albuminuria depend on syphilis and can be cured by a course of mercury. Jonathan Hutchinson described the action of syphilis on the teeth, and about the same time Fournier did also. Syphilis delays dentition; the teeth are finally small and have transverse markings, defects of enamel, etc. In regard to the cure of syphilis, some have recommended cauterization or excision of the initial lesion. Crevelli reports 450 cases of excision, in which 105 were cured. In another large series one-third were cured, but in many the disease returned later. Humphreys said excision is a sure way to cure the disease. I practised

it a good many times. Some cases were benefitted, others not. Twenty-five years ago, in Philadelphia, all the teachers said give no mercury in syphilis. Norris, in particular, was set against the practice, advising instead the iodide of potash.

DR. A. H. VOORHIES said: The oculist sees syphilis chiefly in the tertiary stage. The speaker had recently had a series of cases in which there was no manifestation of syphilis externally, but there was dizziness and an inability to read, and especially to think, suggesting errors of refraction, but glasses were rejected. There was syphilitic disease of the brain. To keep up the maxim that "doctors disagree," I will say that I have never seen a case of syphilis cured. Even if all visible manifestations have disappeared toward the close of life, and in his children, there still remain traces of the disease.

DR. R. L. RIGDON spoke of the inoculability of the disease, and said there often arose serious questions in this regard, amongst others that of marriage. Again, can syphilis be transmitted from father to offspring without infection of the mother? On this point observation has been loose, and the recording of facts equally so. Fournier gives a long list, but few of his cases are reported satisfactorily.

DR. C. CUSHING said the disease must be a great deal more mild in this country than formerly. One sees now only a few bad cases in many years, and then only in the dissipated. He believed inunction to be the ideal method of administration of mercury, for it does not irritate the stomach.

DR. I. RIVAS said the length of treatment is the most important element of success. He, too, believed in inunctions, but some people can't take mercury in that way—married men for example.

DR. R. H. PLUMMER said: I came not here not to talk, but to learn. In regard to the curability of syphilis I might mention a case which occurred in my practice some 18 years ago. The patient was treated for a long time, and was dismissed as cured. Several years later he returned with a new chancre. This is possible only where the disease is in reality cured. Another case I treated three years, and then consented to his marrying. His wife never showed a sign of inoculation; she aborted at two or three months, and has never been pregnant since.

DR. C. F. GRIFFIN called attention to an article by Klotz, of New York, in which the ground is taken that tertiary symptoms may be the result of direct infection. He reported a number of cases of gumma acquired in this way. Some of the patients had been married a short time before and had healthy children.

DR. LANE said, in regard to curability, in the early years of my practice I was in the naval service in the Pacific Squadron, which carried from 1,500 to 2,000 men. At certain times they were allowed to go ashore. Of course many of them contracted syphilis, and received treatment for it. Most of these men were cured, and lived to hearty old age in the service. One old man, who remembered the first Napoleon, was strong and well, though he had had syphilis. He was cured partly because he believed in the doctor.

DR. A. ABRAMS said that he had seen five cases of pulmonary syphilis. Of these three yielded to treatment, and two died.

LONDON.

The Annual Meeting of the British Medical Association.—Service at St. Paul's.—The Power of Life in Life and the Folly of Degeneracy.—Internal Secretions.—The Sections and Sero-Therapeutics.—The Section of Ethics and the Cork Revolt.—Social Festivities.

The annual meeting of the British Medical Association which has just concluded has been the most largely attended within my recollection; indeed, I believe that the number of members and foreign visitors has exceeded any previous record. The meeting has been successful also in some other respects. The sectional work, if not distinguished by any communication of exceptional novelty or any discussion of more than usual excellence, has attained a general high level, and the sectional meetings have been, without exception, well attended. The arrangements for the convenience and amusement of visitors, whether members of the Association or guests, have worked well, and the greatest credit is due to Mr. Andrew Clark, and his colleague, Dr. Isambard

Owen, for the admirable administrative and organizing ability displayed. The work of organization was begun in good time, a sufficient number of sub-committees for organization were appointed, and the working members of these committees took their duties seriously and were given a large share of independent authority. The responsibility thus thrown on them produced the happiest results.

The first public function was a service in St. Paul's Cathedral. A procession of the officers of the Association was formed and passed up the great nave. There was a huge congregation, and the Archbishop of Canterbury preached a sermon, which, if not remarkable for profundity of thought, was characterized by much sympathetic feeling.

The address of the President, Sir Russell Reynolds, who is also President of the Royal College of Physicians, was delivered on the evening of July 30th, at the Imperial Institute, South Kensington. It was a deft piece of workmanship; easy, flowing, with here and there a suggestion for thought, and here and there a winged arrow of sarcasm. The main topic was "the power of life in life—in health, in disease and in its treatment, and the revelations that have been made during the last twenty years of the potency and pre-potency of life." Sir Russell Reynolds referred, of course, mainly to the progress of bacteriology, to the doctrine of the production of immunity, and especially to the "probability of rendering an animal immune by the introduction into its organism of a healthy constituent of the body of another." It is to living agencies we must look, he said, "for help in the care of infancy, the conduct of education—moral, mental and physical—the training of character as well as limbs." Towards the end he digressed into a strong commendation of the silly talk about the *fin de siècle*. The idea that in some mysterious way there will, with the ending of the century, be an end to "the frivolous talk of the last decade, that a 'new earth' will be here for us to tread, and that if there be any idea of heaven lurking in such minds, there will be a 'new heaven' also." He appealed to the profession of medicine to enter its strongest protest "against all this absolutely unscientific and unphilosophic verbiage."

The address in Medicine by Sir William Broadbent was historical, beginning very far back indeed, for it contained surmises as to the state of medicine before Hippocrates.

Mr. Jonathan Hutchinson, who gave the address in Surgery, was also historical—the surgery of the last century and a half in Great Britain.

Professor Schafer, who gave the address in Physiology, dealt with a very modern subject—internal secretions. He rehearsed recent evidence with regard to the internal secretions of the thyroid, kidneys and supra-renal bodies, illustrating his remarks by elaborate tracings of the effect of the juices of these organs on the circulation. The facts, he said, point very strongly in favor of the notion that internal secretions are yielded both by the ductless glands and what are usually known as the true secreting glands, and it is obvious that such internal secretions may be of no less importance than the better-recognized functions of the external secreting glands. That a failure of one or other of these internal secretions has to be definitely reckoned with by the physician there can be no doubt whatever, while at the same time the therapist will be able to avail himself of the active principles which the internally secreting organs afford. At the conclusion of this address a vote of thanks to Professor Schafer was moved by Dr. Bowditch, of Boston, and in his reply Professor Schafer made reference to the interesting fact that at the two previous meetings of the Association in London the addresses in physiology had been delivered by his two immediate predecessors in the chair of physiology at University College, the late Professor Sharpy, and Dr. Burdon Sanderson, now Regius Professor of Medicine at Oxford.

There were no less than fifteen Sections, but in spite of this unusual number the complaint appears to be rather that there has not been time to discuss adequately, the large number of interesting papers read than that there has been any lack of business for the sections to do. Sero-therapeutics came in for a great deal of consideration, occupying much of the time of the Sections of Medicine, Pathology, and Pharmacology and Therapeutics. The approaching revision of the British Pharmacopeia, in which the profession in this country is showing the keenest interest, led to an animated discussion in the last

named section, and also to a rather long debate in the Section of Diseases of Children on doses suitable for various ages.

For the first time this year there was a Section of Ethics. It was presided over by Dr. Cleveland, a well-known general practitioner in North London, and a former president of the Metropolitan Counties Branch; Dr. Bridgwater, of Harrow, formerly President of the Council of the Association, was one of the vice-presidents and a constant attendant. Thanks, perhaps, in part to the restraining influence of these experienced men, the Section belied the apprehensions by which its foundation was regarded by many; apprehensions which have prevented the recognition of such a Section at previous meetings. Among the topics discussed was that crux of modern ethics—advertising by indirect methods. In the course of the discussion Dr. Bridgwater read a resolution which had been adopted by the Council on July 31st: "That in the opinion of this Council the granting of testimonials, which are used for the purpose of advertising proprietary drugs and similar articles, is inconsistent with the dignity of the profession and opposed to its best interests." Another discussion in this Section, which excited much interest, was on the subject of club, medical aid societies and contract practice. Dr. Phillip Lee related the history of the struggle which had been going on at Cork for the last six months between the medical men and the clubs, the main grievances against the clubs being not only the absurdly low rate of payment to the medical officers, but also the inclusion in the club of persons well able to pay ordinary fees; it is said that men with as much as £1,000 a year have been permitted to remain members of these clubs and so obtain medical attendance for themselves and their families for less than £1 a year. So far has the abuse gone that a man would join two clubs, so as to secure the advantage of a consultation without extra payment! It was, perhaps, this last abuse which did more than anything else to make the profession unite, for by its operation no rank of the profession escaped.

The annual dinner of the Association was attended by over 600, and among the speakers were the Lord Chancellor, and Dr. W. W. Keen, of Philadelphia, who delivered a speech which was much applauded, and has been the talk of every one since. The social side of the meeting was very enjoyable, at least to persons endowed with a cast-iron constitution. A fete at the Botanic Gardens, and a conversazione at the Imperial Institute immediately after the President's address were both blessed with fine evenings, as was very necessary if they were to be successful. Altogether the sixty-third meeting of the Association will not be soon forgotten by those who were present.

LONDON, August 6, 1895.

OBITUARY.

GERRARD GEORGE TYRRELL, M.D.

DR. GERRARD GEORGE TYRRELL was born in Dublin, Ireland, September 16, 1831. He received his preliminary professional education at the Carmichael School of Medicine, where he obtained prize medals in Surgery, Medical Jurisprudence, Botany, Chemistry, and the Institutes of Medicine. He attended the Richmond Surgical, the Whitworth Medical, and the Rotunda Lying-in Hospitals, being admitted a licentiate in midwifery in the latter, in the year 1854. He obtained the license of the Royal College of Surgeons in Ireland in 1856, and that of the King and Queen's College of Physicians in 1859. He also took the license in midwifery of the latter college in the same year. In 1880, under the new charter, he became a Member of the, now, Royal College of Physicians of Ireland. On first entering practice Dr. Tyrrell engaged in the Emigrant Trans-Atlantic service, and after a few voyages decided to remain in the United States. He settled at Milwaukee, Wis., in 1856, and in 1857 was elected County Physician, and subsequently Surgeon to St. Mary's Hospital, which positions he held until he removed to California in 1861. After a brief stay in San Francisco, he next practised in Grass Valley, where he remained until his removal to Sacramento in 1868; here he continued in active practice until a few weeks before his death. The doctor was one of the most active and prominent members of the profession in Sacramento during his quarter of a century's residence in this city, and he was widely known throughout the State. He was a careful diagnostician, and kept himself well informed in the advances of medical

science. He was always active in the organization and maintenance of medical societies. He was a charter member and ex-President of the Sacramento Society for Medical Improvement, and for many years contributed much to the active work of that Society, both in his papers and in participation in the discussions. He was a member of the Medical Society of the State of California, serving as its Secretary from the year 1874 until he resigned the position in 1881 to fill the presidential chair, to which he was elected that year. He was a member of the American Medical Association, of the American Public Health Association, and a corresponding member of the Gynecological Society of Boston. He served for several years as Secretary of the State Board of Health. For some time he filled the position of Surgeon and Major of the First Artillery Regiment, N. G. C. In 1883 he was appointed by Governor Stoneman Surgeon-General of the State, with the rank of Colonel; and in 1887 was reappointed to the same position by Governor Bartlett, being later, at his own request, placed on the retired list, with the rank of Colonel. W. E. B.

REVIEWS AND NOTICES.

LABORATORY GUIDE FOR THE BACTERIOLOGIST. By Langdon Forthingham, M. D. V. Assistant in Bacteriology and Veterinary Science, Sheffield Scientific School, Yale University. Illustrated. Philadelphia: W. B. Saunders. Price, 75 cents.

This booklet is designed for ready reference, and the object has been admirably achieved. There is, however, this objection, that there is not enough of it, as many routine methods, such as Flagella staining, etc., are not considered.

LECTURES ON AUTO-INTOXICATION OR SELF-POISONING OF THE INDIVIDUAL. By C. H. Bouchard, Professor of Pathology and Therapeutics, and Physician to the Hospitals, Paris. Translated with a preface, by Thos. Oliver, M. A., M. D., F. R. C. P., Professor of Physiology, University of Durham; Physician to the Royal Infirmary, Newcastle-upon-Tyne. Philadelphia: The F. A. Davis Company. pp. xvi 302. Price, extra cloth, \$1.70.

In this work, which, by the way, is admirably translated, the author seeks to emphasize the part played by the physiological and pathological alkaloids in many disease processes. The book is exceedingly interesting, too interesting in fact to be real, and as the reader is occasionally beguiled by the florid and extravagant diction, he is inclined to regard the author as a romancist, and not a scientist. The book is worthy of perusal, if only for the purpose of inculcating the dangers of intestinal putrefaction.

AN ILLUSTRATED DICTIONARY OF MEDICINE, BIOLOGY AND ALLIED SCIENCES. By George M. Gould, A.M., M.D. Including pronunciation, accentuation, derivation, and definition of the terms used in medicine, surgery, anatomy, physiology, therapeutics, materia medica, dietetics, pathology, ophthalmology, otology, laryngology, gynecology, obstetrics, dermatology, pediatrics, legal medicine, psychology, climatology, histology, neurology, toxicology, etc., and the various sciences closely related to medicine—dentistry, pharmacy, chemistry, hygiene, zoölogy, botany, electricity, bacteriology, parasitology, microscopy, veterinary medicine, etc., based upon recent scientific literature. Philadelphia: P. Blakiston, Son & Co. Sheep, \$10.00; half Russia, thumb index, \$12.00.

It is impossible, in the short space necessarily accorded to the notice of a book, to give more than very few of the points in which Gould's larger dictionary differs so conspicuously from all others of its kind. Perhaps the most distinctive features are its freshness, newness, and conciseness. Everything about it is new, even the illustrations, that in so many text-books are but dreary repetitions of those that have gone before, are here novelties. Mechanically the book is a comfort. It is well bound and beautifully printed, with type, paper, and style that is, to us, most attractive. The volume opens flat and stays open at any page that may be turned. Even little features such as these commend a book in such constant use as a medical dictionary. Its 1634 pages contain a vast amount of information that is encyclopedic in character. By the very liberal use of tables much of this has been arranged in the most convenient form for reference. Subjects that are correlated have been grouped and

the factor of mental association has been utilized throughout. These tables are a mine of wealth in ready reference; many of them are new, one on stains and reagents occupying 39 pages. The illustrations have been carefully considered and while there are very many of them, all seem distinctly useful. None have been employed that will not be fresh in ten or twenty years, and in this it differs from other works whose pictures in that time might grace a work on archeology. The pronunciation is given in the simplest phonetic manner, and can be easily understood. The orthography is, in dictionaries, a new departure. For some years Dr. Gould has persistently advocated the style of spelling adopted by THE MEDICAL TIMES as far back as 1888, in the universal abolition of the diphthong. Believing, with Prof. Whitney, of Century Dictionary fame, that "the language is struggling toward a more consistent spelling, and it is proper to cast the influence of the dictionary in favor of this movement" Dr. Gould has thrown all of his in this direction. Some of these innovations, for which the profession has been in a measure prepared by the *Medical News*, seem at first glance peculiar, but there is little doubt that all are bound to come in time. Constant daily use of this dictionary for several months convinces us that it has few faults and very many admirable features. It is certainly accurate, and the proof-reading has been especially careful. When reviewing the author's smaller dictionary, we expressed the opinion that it was the best small dictionary extant. We have no hesitation in saying that this is the best large dictionary of to-day, and the physician in need of a progressive work that is thoroughly up to date, had best invest in "Gould."

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held August 6, 1895, the following were granted certificates to practise medicine in this State:

James Brown, Portland, Or.; Med. Dept. Willamette Univ., Oregon, April 2, '95.
 Henry James Caldwell, San Francisco; Univ. Trinity Coll., Canada, April 5, '85; Trinity Med. School, Canada, April 16, '85.
 Charles Henry Carter, Pasadena; Rush Med. Coll., Ill., Feb. 24, '80.
 Elizabeth H. Cassel, Salinas; Woman's Hosp. Med. Coll., Ill., Feb. 27, '83.
 Riley W. Cavins, Los Angeles; Indiana Med. Coll., Ind.; Feb. 29, '72; Med. Coll. of Indiana, Mar. 1, '82.
 Thos. L. Craig, Monterey; Coll. Phys. and Surg., Keokuk, Ia., Mar. 2, '81.
 Frank W. Dudley, San Francisco; Med. Dept. Univ. Cal., July 13, '95.
 Marcus W. Frederick, San Francisco; Med. Dept. Univ. Leipsic, Germany, April 27, '88.
 George Leo Helms, San Francisco; Med. Dept. Univ. Cal., July 13, '95.
 James P. Hull, Lockeford; Med. Dept. Univ. Cal., July 13, '95.
 George F. Hunter, San Francisco; Med. Dept. Univ. Buffalo, N. Y., Feb. 21, '81.
 Charles E. Lee, Anaheim; Med. Dept. State Univ., Iowa, Mar. 5, '73.
 Frederick A. Lutz, Carson, Nev.; Med. Dept. Univ. Cal., July 13, '95.
 Marah E. McClun, San Francisco; Cooper Med. Coll., Cal., Dec. 7, '94.
 A. M. F. McCollough, Los Angeles; Jefferson Med. Coll., Pa., Mar. 10, '77.
 Helen McKnight, San Francisco; Med. Dept. Univ. Cal., Nov. 20, '94.
 Frank B. Moran, Healdsburg; Med. Dept. Univ. Mich., June 28, '94.
 Ida B. Parker, Los Angeles; Coll. Med. Univ. Southern Cal., June 4, '95.
 Gregory Phelan, Brussels, Belgium; Med. Coll. of the Pacific, Cal., Oct. 28, '80.
 Louis James Preston, Los Angeles; Med. Dept. Univ. City of New York, June 18, '88.
 John M. Quigley, San Francisco; Med. Dept. Willamette Univ., Or., April 4, '92.
 Mary J. Sankey, San Francisco; Med. Dept. Univ. Cal., July 13, '95.
 Charles J. Schmelz, San Francisco; Med. Dept. Univ. Cal., July 13, '95.
 Larz A. Smth, San Francisco; Cooper Med. Coll., Cal., Dec. 6, '94.
 C. Francis S. Tate, Los Angeles, Coll. Med. Univ. Southern Cal., June 4, '95.
 John Tiedmann, San Francisco; Long Island Coll. Hosp., N. Y., Mar. 31, '9.
 Wm. A. Trafton, Dixon; Med. Dept. Univ. Cal.; July 13, '95.

REFUSED.

W. Haydon; Insufficient credentials.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific) from July 20, 1895, to August 20, 1895.

The telegraphic instructions from these headquarters of the 6th instant to the commanding officer, Fort Spokane, Wash., directing Assistant Surgeon John S. Kulp to proceed at once to Fort Walla Walla, Wash., and report to the commanding officer for temporary duty, are made of record. Par. 1. S. O. 114, Dept. of the Columbia, August 17, 1895.

The extension of leave of absence on account of sickness granted Major Clarence Ewen, Surgeon (Fort Walla Walla, Wash.), is further extended two months on account of sickness.